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4-17-00

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Docket No.: M-8231 US

April 14, 2000

jc715 U.S. PTO
09/549451
04/14/00

jc780 U.S. PTO

Box Patent Application
Assistant Commissioner for Patents
Washington, D. C. 20231

Enclosed herewith for filing is a patent application, as follows:

Inventor(s): Bluth, Charles; Bluth, James

Title: Health Care Information System

X Return Receipt Postcard
X This Transmittal Letter (in duplicate)
23 page(s) Specification (not including claims)
8 page(s) Claims
1 page Abstract
18 Sheet(s) of Drawings
3 page(s) Declaration For Patent Application and Power of Attorney (unsigned)
2 page(s) Assignment

CLAIMS AS FILED

For	Number Filed			Number Extra		Rate			Basic Fee
									$690.00
Total Claims	35	-20	=	15	x	$18.00	=	$	270.00
Independent Claims	3	-3	=	0	x	$78.00	=	$	0.00
☐ Fee of $260.00 for the first filing of one or more multiple dependent claims per application								$	$0.00
☐ Fee for Request for Extension of Time								$	

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EXPRESS MAIL LABEL NO:

EL569961077US

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EL569961077US

04/14/00
jc780 U.S. PTO

HEALTH SERVICES AND INFORMATION SYSTEM

Charles Bluth and James Bluth

BACKGROUND OF THE INVENTION

The field of medicine has long employed health care screening to diagnose and tract patients' health. An annual physical examination is a well-known part of patient medical care.

Hospitals, health clinics, and pharmacies, in addition to an active role is supplying medical supplies and pharmaceuticals, have actively promoted various health care screenings and wellness programs. Programs are sometimes offered with the help of other health care providers or coordinated on a national basis with groups such as the American Lung Association, the American Diabetes Association and the American Podiatric Medical Association.

Health care screening devices in hospitals, physician's offices, businesses, and the like, in combination with the growing number of home diagnostic kits that are available have increased the efficiencies in health care delivery. Chain drug store operators have increasingly encouraged individual testing by making available in-store diagnostic testing devices. For example, a pharmacist who fills a high-blood pressure medicine for a customer may encourage the customer to regularly check blood pressure. The customer may use a blood pressure measurement and screening device in the drug store.

To increase attention to the health care screening category, many medical and health produce retailers offer medical tests and screening for consumers visiting their stores. Most commonly, the retailers check cholesterol levels and blood pressure, although many other tests are available. In addition to supplying a valuable customer service, in-store testing effectively educates consumers about various health problems

that can be better managed by a regimen that includes monitoring. Typically consumers are unaware of the technological advances that have made health care screenings feasible in the clinical, retail, and home settings. Pharmacies and drug retailers have generally found that point out that the availability of screening test devices in the stores increases traffic and cultivates customer loyalty.

The offer of in-store testing commonly is highly popular among customers and greatly boosts the number of people visiting the store. In-store testing is valuable for positioning stores as health and wellness centers as well as retailers of health care products. In-store testing increases sales since a consumer who learns of a health problem through screening in the store has some likelihood of purchasing a home test kit to monitor the problem. For example, a customer who discovers a problem of high blood pressure through an in-store test is a likely candidate to purchase a home test kit.

In-store health care screening expands the pharmacist's role in patient care through education. Test device manufacturers have advanced the design and functionality of products to simplify usage and improve accuracy. The challenge for further improvements in health care screening is to educate consumers about the need for medical tests, and demonstrate that many tests are effectively performed by publicly available devices or at home.

A present concern is that health screening is performed on an insufficient segment of the population to efficiently prevent or treat ailments. Other concerns are that health screening is too costly, limited in scope, and time-consuming both for individual patients and health care providers. Despite these deficiencies, a strong awareness exists of a need and desire for improved health screening procedures and equipment. Health care providers, insurance companies, and employers that ultimately pay for health care have encouraged development and usage of improved, accurate yet economic health screening facilities both for treatment and prevention of health care problems.

Generally individual doctors and small groups of doctors have insufficient capital to maintain a complete health screening facility. Even if more health care

providers were suitably equipped, typically only a small part of the population exploits health screening facilities due to time and cost considerations and apathy.

What are needed are health screening devices, facilities, and methods that can be placed in locations that are convenient to health care customers. Suitable locations include retail outlets such as pharmacies or drug stores where customers already make health care purposes, but also include medical offices or hospitals, convalescence and elderly care homes, work places such as offices or factory sites, college dormitories, and the like. What are further needed are health screening devices, facilities, and methods that are convenient, efficient, low in cost, and professionally accurate in screening health care data.

SUMMARY

In accordance with one aspect of the present invention, a health kiosk provides blood pressure testing, a health and fitness evaluation, and a medication encyclopedia. The health kiosk typically interfaces to a computer or server, such as a pharmacy computer or a remote server which compares pharmaceuticals selected by a user to information in the medication encyclopedia to determine compatibility for prescription medications and over-the-counter medications. In some systems, the kiosk also supplies one item or more of an extended health information, a weight scale constructed into the seat of the kiosk, a directory of health care service and product providers, an a directory of community health, support, and service groups.

The health services and information system delivers services in areas ranging from patient education, medical research, dispensing of counseling and health information, and disease state management to database centralization of pharmacist-owners' credentials. The health services and information system includes a network web site that supplies consumers with information about such topics as nutrition and fitness, women's and men's health, diabetes, asthma, HIV and other health conditions. Consumers also use the web site to locate a nearby pharmacy.

Health care screenings are integral to delivery of services since screenings clearly set forth a customer's goals and needs.

The health services and information system supports third-party prescription plans and uses a managed care network to contract for third-party business on behalf of its network of stores. The managed care network allows a retailer to compete on an equal basis with chains for third-party contracts. Otherwise, most independent retailers would be locked out of the third party contracts.

Along with increased buying power, franchisees have access to support services including a nationally coordinated marketing program with health care screenings. Although, only basic blood pressure testing is described, the health services and information system can additionally support more sophisticated evaluations including vision tests, and evaluations of cholesterol levels and body fat. For example, other tests that can be performed include colorectal cancer tests, blood glucose screenings, glaucoma tests, screening for foot fungus infections, and others.

BRIEF DESCRIPTION OF THE DRAWINGS

The features of the described embodiments believed to be novel are specifically set forth in the appended claims. However, embodiments of the invention relating to both structure and method of operation, may best be understood by referring to the following description and accompanying drawings.

FIGURE 1 is a schematic block diagram illustrating a suitable network for interconnecting one or more health information kiosks and a health information server.

FIGURE 2 is a pictorial diagram illustrating a suitable health information kiosk for usage in interfacing to a health services and information system.

FIGURE 3 is a pictorial diagram illustrating another view of the suitable health information kiosk with improved visualization of a blood pressure cuff.

FIGURE 4 is a pictorial computer screen display illustrating a main menu screen that is initially displayed when health services and information system software is activated.

FIGUREs 5A and **5B** depict pictorial computer screen displays including a blood pressure testing start screen and a blood pressure testing end screen.

FIGUREs 6A, **6B**, and **6C** are graphic displays showing pressure waveforms depicting examples of data that are analyzed to perform blood pressure measurements.

FIGURES 7A and **7B** are pictorial computer screen displays associated with a health risk appraisal function, including a questionnaire form for setting user parameters and a health care appraisal result screen.

FIGURES 8A, **8B**, **8C**, and **8D** are pictorial computer screen displays associated with a medication encyclopedia display function.

FIGURES 9A and **9B** are pictorial computer screen displays that illustrate a health information display function.

FIGURES 10A, **10B**, **10C**, and **10D** are pictorial computer screen displays that illustrate a local community information display function.

FIGURES 11A and **11B** are pictorial computer screen displays that illustrate a "Shopping Mall" business access display function.

FIGUREs 12A and **12B** are pictorial computer screen displays showing a blood pressure history access screen to allow protected access to a user's blood pressure history information.

FIGUREs 13A, **13B**, and **13C** depict several examples of schematic graphs that show collective user health data.

FIGURE 14 is an example of a table showing a compilation of acquired samples of health care data that can be generated by the health services and information system.

FIGURE 15 is an example of a test printout that can be produced by the health services and information system.

FIGURE 16 is a schematic screen display showing an entry screen for user identifying information for use in saving and accessing secured patient information.

FIGURE 17 is a schematic screen display that illustrates a registration form for a web site.

FIGURE 18 is a schematic screen display illustrating a weight measurement result screen.

DESCRIPTION OF THE PREFERRED EMBODIMENT(S)

Referring to **FIGURE 1**, a schematic block diagram illustrates a suitable network **102** for interconnecting one or more health information kiosks **110** and a health information server **104**. Typically, an individual health information kiosk **110** includes a processor **106** or controller with a storage **108** or memory that maintains a local archive of user information that stores a relatively small number of relatively recent test results, measurements, and possibly other information. The processor **106** executes a logic (not shown), typically a computer program that includes health services and information system software **120**, that is stored as software, firmware, control logic or other executable forms as are known by one of ordinary skill in the art. In an illustrative health services and information system **100**, the health information kiosk **110** employs additional computing power by adding a digital signal processor (DSP) **112** that operates in conjunction with the processor **106** to perform computation-intensive operations such as various health test operations.

The local archive includes tracking of health reading including blood pressure, heart rate and weight. Individual users also have an individual personal health site on the health information server **104**. The health information server **104** is generally used to store a long-term archive of user results, measurements, and information received from the individual health information kiosks **110**. In one example, the local health information kiosk **110** stores information from many users and all information that is generated on the health information kiosk **110** is automatically loaded, for example on a daily basis, to the central health information server **104**. The results are sent to the health information server **104** for long-term storage and archiving. The information

for the individual users are stored on corresponding personal health sites that are assigned to the particular individual users so that accurate and current information are available for all of the individual users.

In the illustrative example, the individual users determine the degree and level of health care information to be acquired and stored on the site. The individual user assigns a privilege level to allow the user's physician or pharmacist to enter information to the site with a desired level of security. The physician or pharmacist having the privilege granted by the individual user gains entry to the user site upon entry of a physician or pharmacist license or registration number granted by a federal, state, or local licensing authority. Entry of the licensing or registration number enforces user security and privacy concerns, preventing fraudulent change to the user database. Using the secured access to the user's site, the physician can be allowed to download health care information to the user site. Information is not changed on the site so the physician's level of security insures accuracy of the downloaded information. The physician's security specification permits the physician to transmit secured prescription orders and records to the individual health care site.

The health services and information system **100** benefits the individual users by permitting secured accessibility of health care information and prescription needs anywhere in the world through usage of the internet. The health services and information system **100** supplies accurate and current individual health care information that is accessible in a crisis or emergency situation.

In one example, the health information server **104** includes a layered security program for protecting user data from privacy violations. In an example of a layered security program, a user's personal health site can have a sixteen digit security card for entry into the health information kiosk **110** and an individual personal identification (PID) number to access the user's personal health site on the health information server **104**. The level of security is equivalent to the security of an ATM machine in which the only person having access is the user since the user establishes the PID number.

The health information kiosks **110** are generally accessible to the public. For example, pharmacies or drug stores are suitable facilities for supplying floor space for a health information kiosk **110**. Other suitable facilities include other retail outlets, health care providers such as physician offices, clinics, hospitals, and the like. The facilities housing a health information kiosk **110** typically have an agreement with the kiosk supplier to supply information, services, and products. The health information kiosk **110** executes various functions such as health testing and health evaluation. In some systems, the health information kiosk **110** supports operations including health testing and measurement, health and fitness evaluation, and various health care information sources. Various health tests may be supported. Common health tests include blood pressure testing, heart rate testing, and the like. For example, some systems may support various noninvasive blood analyses using pulse oximetry data acquisition. Measurements may include simple or complex measurements. One common measurement is a weight measurement that is supplied using a seat scale that is installed into the seat of the health information kiosk **110**. Health care information sources may include a medication encyclopedia, a vitamin and supplement encyclopedia, an electronic health care library, health care provider directories, and the like.

The health information kiosk **110** interfaces to a server such as a store computer system or to a centralized server that services a wide geographical area. For example, the health information kiosk **110** may interface to a local pharmacy or drug store computer. The health information kiosk **110** may alternatively interface to a main frame health information server **104** that services a large area such as a country or region of the world. The health information kiosk **110** in combination with the health information server **104** typically includes a highly comprehensive pharmacy library covering prescription medications and over-the-counter remedies.

The individual health information kiosks **110** commonly include display software that displays a selected idle presentation, an attract screen with still-frame or dynamic graphics, or plays video clips that promote a selected party such as the sponsoring store or medical service providers.

Software programs in the individual health information kiosks **110** is updated by downloading, for example via internet access, or media transfer such as removable disk loading.

The health information server **104** commonly supports Internet sites for user access of health information, storage of personal history information, and to shop for products that are not available local to the health information kiosk **110**.

Referring to **FIGUREs 2** and **3**, a pictorial diagram shows a suitable health information kiosk **110** for usage in interfacing to a health services and information system **100**. The health information kiosk **110** includes a test interface **212** and a display **216**. The display **216** can be configured to form a touch-screen keyboard for some data input operations. Some examples of the health information kiosk **110** can include a measurement interface **222** such as a weighing scale. The test interface **212** and display **216** are connected to a processor or controller (not shown) that executes diagnostic test operations using data acquired using the test interface **212**. In an illustrative example, the test interface **212** is a blood pressure cuff **213** for acquiring blood pressure measurements. A microphone **211** is attached to the blood pressure cuff **213** to measure a sound or audio signal. The display **216** in a configuration as a user interface or keyboard is used to acquire patient data and other information from the user. The processor includes communication interfaces for communicating with the test interface **212**, the display **216**, and a remote terminal so that the health information kiosk **110** can be connected into a communication network (not shown). In some systems, the health services and information system **100** includes a telephone handset (not shown) that a user may employ to receive information from the health services and information system **100** in privacy or for usage in telephone communication. Some versions of the health information kiosk **110** optionally include a printer **220** for printing test results, information materials, advertisements, coupons, and the like.

The illustrative test interface **212** is a blood pressure cuff **213** with one or more pressure transducers (not shown) for acquiring blood pressure waveforms from the user. The pressure transducer has an electrical connection to the processor via the

communication interface so that pressure waveform data is supplied to the processor. The processor executes a computerized blood pressure detection algorithm to produce highly accurate measurements of systolic and diastolic blood pressure, and mean blood pressure. The processor also analyzes the blood pressure waveforms to detect heart rate information.

The processor executes software programs including data analysis routines that produce highly accurate blood pressure and heart rate measurements. The health services and information system **100** acquires other health care information from the patient and from various health care databases via network communication linkages to generate a full health appraisal. The health services and information system **100** includes local storage and the network communication link to external storage resources to allow a user to access pertinent health care information. For example, the health services and information system **100** permits the user to access a full medication encyclopedia that lists pharmaceutical medications that are currently available on the market. A health care provider directory is accessible via the network interconnection, either on the kiosk or by an Internet connection, to enable the user to find area physicians, specialists, clinics, hospitals, health maintenance organizations (HMOs), and the like.

One example of a suitable display **216** is a high-resolution Active Matrix color touchscreen display. The display **216** is used to present menus and controls, as well as to present information including test results, measurements, health information such as seasonal health information. A text display shows text in one or more of various selected languages. Many other displays of various sizes, specifications, and utilizing various technologies are also suitable.

One example of a suitable test interface **212** is a blood pressure cuff **213** including a nylon washable exterior cuff with a seamless inner natural latex bladder that is inflated using a pneumatic power system. A suitable cuff size is 30x12.5 cm. The cuff can be constructed of medical grade silicone tubing that is non-reactive, and thus allergy-free, to body tissue. Cuff pressure is regulated by pressure monitors (not shown) that are inherently stable and are calibrated to function accurately with cuff

pressure variations of less than +/-1% over a full operating range of systolic maximum pressure 250mm-Hg and minimum pressure 80mm-Hg, and diastolic maximum pressure 130mm-Hg and minimum pressure 38mm-Hg, a differentiation of 8 points between systolic and diastolic pressure, and a heart rate from 38 to 200bpm. The monitors use automatic zero pressure variations to prevent accuracy from being affected by altitude level or other changes in atmospheric pressure, temperature, and humidity. The exemplary test interface **212** also detects sound signals for usage with Korotkoff sound detection. Both pressure signals and sound signals are converted to digital form and transmitted to the processor to perform blood pressure measurements using both oscillometric and auscultatory analysis. The pressure and sound signals can be processed to determine heart rate measurement using a beat-to-beat averaging method. In some examples, tests are activated using a touch screen in which a virtual green start button initiates a test procedure by inflating the cuff positioned about the patient's arm. Touching the display screen halts the test and returns the pneumatic cuff to the open position. Various other specifications, materials, and technologies or combinations of technologies that are known by those having ordinary skill in the art are also suitable.

An illustrative measurement interface **222** is a weighing scale formed into a moveable seat **224** that is attached to the health information kiosk **110**. The seat scale has accuracy within one pound. In some systems, the seat **224** of the health information kiosk **110** is moveable so that the test interface **212** and display **216** are wheel-chair accessible and easily used by the disabled without assistance.

Referring to **FIGURE 4**, a pictorial computer screen display illustrates a main menu screen **402** that is initially presented when health services and information system software **120** is activated. The health services and information system software **120** is a program employing a graphical user interface to receive information from a user and to display selected display screens to the user. The graphical user interface of the health services and information system software **120** is generally a touch screen display in which various touch buttons are actuated when the user touches a defined region on the display screen. In one example, the main menu screen **402** has several touch buttons including a blood pressure test button **410**, a health risk

appraisal button **412**, a medication encyclopedia button **414**, a health information selection button **416**, a community directory button **418**, a special coupons access button **420**. The main menu screen **402** further includes a vitamins and minerals selection button **422**, a blood pressure history button **424**, a weighing function request button **426**, and a personal health site button **428**. The main menu screen **402** permits the user to touch a selection to begin multifaceted access to the health services and information system database. The main menu screen **402** facilitates user access to information concerning the specific user's health, the local community, the business or businesses sponsoring the health information kiosk **110** executing the health services and information system software **120**.

When the user actuates the blood pressure test button **410**, the health services and information system software **120** displays a blood pressure testing start screen **500**, shown in **FIGURE 5A**, that instructs the user in performing a self-test of blood pressure. The blood pressure testing start screen **500** includes a graphic **502** that instructs the user to place an arm in the blood pressure cuff test interface **212** in an appropriate position. The blood pressure testing start screen **500** also has soft buttons including an illustration button **504** for displaying additional educational and instructional material regarding the blood pressure test procedure, a start button **506** that initiates operation of the test interface **212** to begin acquiring data, and a main menu button **508** that allows the user to return to the main menu screen **402**.

The user places the left arm in the cuff as is shown on the display **216**, touches a virtual start button on the display screen and the health services and information system **100** controls the test interface **212** to perform a blood pressure measurement in conjunction with computation operations executed by the processor **106** and, in some systems, the DSP **112**. When the test is completed, the user touches a virtual touch print button to receive a printout of blood pressure results.

Pressing the start button **506** actuates the test interface **212** to begin the blood pressure testing, typically by inflating the blood pressure cuff **213**, then gradually deflating the cuff while acquiring pressure and sound readings from the cuff. The sound and pressure measurements acquired by the test interface **212** are sent to

processors including a digital signal processor (not shown) and a central processor (not shown) which process the measurements to determine blood pressure using one or more techniques. A first technique is a conventional sound (auscultatory) method. A second technique is a conventional pressure (oscillometric) method. A third technique calculates blood pressure using a combination of sound and pressure measurements. In some systems, blood pressure samples are determined using all three of the auscultatory, oscillometric, and combination techniques. A complete blood pressure waveform is acquired for a plurality of heart cycles and stored in memory for analysis, allowing a determination of both systolic and diastolic blood pressure after cuff pressure is deflated. In an illustrative system, the digital signal processor is capable of executing thirty-five million operations per second, to permit analysis of approximately 6500 samples in a single blood pressure test. In some systems, the heart rate is determined using a beat-to-beat averaging technique.

Referring to **FIGUREs 6A**, **6B**, and **6C**, graphic displays of pressure waveforms are depicted which show examples of data that is analyzed to perform blood pressure measurements. **FIGURE 6A** shows a Bell Curve of an actual blood pressure wave. **FIGURE 6B** shows a magnified section of the blood pressure waveform. **FIGURE 6C** displays a pressure waveform showing systolic and diastolic pressures.

When the blood pressure test is complete, the health services and information system software **120** displays a blood pressure testing end screen **520**, shown in **FIGURE 5B**, that displays results of the blood pressure test. The blood pressure testing end screen **520** includes a graphic **522** showing results of the blood pressure test including systolic pressure, diastolic pressure, and heart rate. The blood pressure results display rates the measured systolic and diastolic pressures in relation to desirable and unhealthy rates. The blood pressure testing end screen **520** has soft buttons including a store results button **524** for storing the patient's results in the patient's individual database, a health care appraisal button **526** which, like the health risk appraisal button **412** of the main menu screen **402**, generates a health care appraisal screen. The blood pressure testing end screen **520** also has a main menu button **508** that allows the user to return to the main menu screen **402**. The blood

pressure testing end screen **520** has a print button that the user can actuate to generate a printout of the results for user record-keeping. In some systems an icon (not shown) may be supplied that allows a user to store history information to a personal secured database.

When the user actuates the health care appraisal button **526** on the blood pressure testing end screen **520** or the health risk appraisal button **412** on the main menu screen **402**, the health services and information system software **120** generates and displays a health risk appraisal screen. The pictorial computer screen displays associated with a health risk appraisal function, include a health care appraisal questionnaire form **700** for setting user parameters and a health care appraisal result screen **720**, respectively shown in **FIGURES 7A** and **7B**. The health services and information system software **120** first displays the health care appraisal questionnaire form **700** filled with any previously available information. Fields in which data has not been entered request updating. The user may update filled fields by actuating a display bar showing a value in the field. In the illustrative system, the health care appraisal questionnaire form **700** displays the user's age **702**, height **704**, weight **706**, gender **708**, frame size **710**, exercise habits **712**, and smoking habits **714**. Additional fields may be added to the health care appraisal questionnaire form **700** or a subsequent screen for setting additional conditions. The health care appraisal questionnaire form **700** also includes a continue button **716** for proceeding to additional questionnaire forms or for proceeding to the health care appraisal result screen **720**.

The health care appraisal result screen **720** shown in **FIGURE 7B**, displays results of the health risk appraisal including systolic pressure, diastolic pressure, heart rate, and appraisal ratings. The appraisal function is typically executed by the processor and combines blood pressure results, heart rate results, and answers to health-related questions to determine a health risk category for the user. The appraisal ratings include an appraisal score, a health rating, and the health risk rating.

User information including test results, measurement results, analysis, and personal information, if authorized by the user, can be entered into a customer

database for usage by sponsors of the health information kiosk **110**. The sponsors to attract user patronage of the kiosk and the sponsor of the kiosk may support a user rewards sign-up program.

The health care appraisal result screen **720** has a main menu button **730** that allows the user to return to the main menu screen **402**, and has a print button which the user can actuate to generate a print-out of the results for user record-keeping.

The health risk appraisal operation is based on data made available by the U.S. government in combination with the user blood pressure results. The user answers questions that are presented on the display **216**. The health services and information system **100** determines a health risk appraisal and presents the appraisal results on the display screen. The user can actuate a virtual print button **732** on the display screen to print the results on the printer **220**.

Referring to **FIGURES 8A** and **8B**, several pictorial computer screen displays exemplify a medication encyclopedia display function. When the user is accessing the main menu screen **402** and actuates the medication encyclopedia button **414**, the health services and information system software **120** displays a medication encyclopedia index screen **810**, shown in **FIGURE 8A**. In one example, the health services and information system **100** includes an encyclopedia of over 7500 over-the-counter and prescription medications. The encyclopedia specifies directions for using the medications, side effects, proper and improper usage, and other pertinent information. The medication encyclopedia index screen **810** includes a plurality of touch buttons in the form and arrangement of a virtual keyboard to allow the user to enter the first letters of a particular medication. In one example, when the user enters the first three letters of a medication, the health services and information system **100** displays the selected medication.

The medication information is supplied, for example, from the United States Pharmacopoeia leaflet patient version that is maintained as the information is regularly updated in government documents.

FIGURE 8B depicts a medication entry screen **812**, illustratively showing the description of an azatadine oral medication. The medication entry screen **812** includes several touch buttons for accessing additional information relating to the medication. A first button (WHAT) **814** is highlighted to signify that the display describes the medication. A second button (TELL) **816** describes usage for the medication. A third button (TAKE) **818** relates common dosages or dosages for the particular user, as determined by information from health care providers of the user or from user information in the database of the health services and information system **100**. A fourth touch button (WARNING) **820** describes warnings regarding usage of the medication. A fifth touch button (SIDE EFFECTS) **822** informs the user of any known side effects of the medication. A sixth touch button (View Another Drug) **824** is used to return to the medication database to select additional medications that are commonly used for the same purposes as the accessed medication. A seventh touch button (DRUG INTERACTION) **826** is accessed to determine whether the medication taken in combination with any of the user's current medications will cause adverse reactions. An EXIT touch button **828** allows the user to return to the main menu screen **402**.

When the user actuates the seventh touch button (DRUG INTERACTION) **826**, a number keyboard is displayed to permit the user to enter a PIN number that protects the users private information database. The user first selects an over-the-counter product that is considered for usage and actuates the seventh touch button (DRUG INTERACTION) **826** from the medication encyclopedia. The user enters a personal identification number (PIN). The health services and information system software **120**, typically executing on the processor, checks the pharmacy database and generates a response of either: (1) Interaction, Please see the Pharmacist, or (2) No Interaction - Use Allowed. After the search is completed, information is made accessible to the local pharmacist. The pharmacist collects a file of customers and interactions that are checked in subsequent references. A warning screen may be displayed.

Referring to **FIGURES 9A** and **9B**, pictorial computer screen displays exemplify a health information display function. When the user is accessing the main

menu screen **402** and actuates the health information selection button **416**, the health services and information system software **120** displays a health information menu screen **910**, shown in **FIGURE 9A**. The health information menu screen **910** allows the user to link to various information sites relating to health care. Typically accessed entries are viewed and printed by the user, if desired. Many sites include color graphics and full motion video. The accessible selections can include standard entries or can be customized for a particular location of the health information kiosk **110**. The illustrative health information menu screen **910** includes touch buttons to access disease information **914**, information relating to the human body **916**, exercise and fitness information **912**, food facts **918**, and medical facts **920**. **FIGURE 9B** depicts a disease screen **930** that can be displayed when user actuates the touch button for the disease information **912**. The disease screen **930** includes touch buttons that the user can actuate to receive information relating to a particular disease or affliction.

The health information is displayed in several formats including text, graphics, full motion video, and on-line information optioned via Internet. For sensitive information, the user can lift the telephone handset (not shown) to listen to the topics in privacy.

Referring to **FIGURES 10A**, **10B**, **10C**, and **10D**, pictorial computer screen displays illustrate a local community information display function. The community display generates a directory of local health care providers or medical facilities such as physicians, hospitals, emergency centers, crisis centers, and the like for display to a user. In addition to local health care providers and medical facilities, the health services and information system **100** also may generate entries that are regional, national, or international in scope, generally for providers of services that are more wide-ranging in scope. The community display also stores and displays information relating to schools, colleges, churches, and other public or service facilities.

When the user is accessing the main menu screen **402** and actuates the community directory button **418**, the health services and information system software **120** displays a community services menu screen **1010**, shown in **FIGURE 10A**. The community services menu screen **1010** allows the user to link to various information

sites relating to health care. Typically accessed entries are viewed and printed by the user, if desired. Many sites include color graphics and full motion video. The accessible selections can include standard entries or can be customized for a particular location of the health information kiosk **110**. The illustrative community services menu screen **1010** includes touch buttons to access a physician directory **1012**, a school directory **1014**, a hospital directory **1016**, a civic group's directory **1018**, and a support groups directory **1020**.

When the user actuates the support groups directory touch button **1020**, the health services and information system software **120** displays a support groups menu **1030** that presents touch buttons for accessing directories of particular types of support groups. **FIGURE 10B** depicts an example of a support groups menu screen **1030** that is displayed when user actuates a touch button for alcohol and drug abuse programs from the support groups menu screen **1030**. The support groups menu screen **1030** includes touch buttons that the user can actuate to receive information relating to various treatment programs for treating a particular disease or affliction. In the illustrative system, one of the touch buttons on the support groups menu screen **1030** is an alcohol and drug abuse touch button **1032**.

When the user actuates the alcohol and drug abuse touch button **1032**, the health services and information system software **120** presents an alcohol and drug abuse service provider directory screen **1034**, an example of which is shown in **FIGURE 10C**. Entries in the alcohol and drug abuse service provider directory screen **1034** show the name, address, and telephone number of a listed alcohol and drug abuse service provider. The alcohol and drug abuse service provider directory screen **1034** has a cursor for pointing to a particular entry, an "up" button and a "down" button for scrolling through the list, and a "select" button for selecting a particular entry that is designated by the cursor.

When the user selects an entry, the health services and information system software **120** displays a screen showing additional information relating to the selected group. **FIGURE 10D** shows a group screen for an alcoholics anonymous support group.

Using the community information display function, the user can obtain local and wide ranging information in a list format. Alternatively, if the health services and information system **100** includes the telephone handset (not shown), the user can use telephone communication via the telephone handset to connect directly to the community service organization of interest.

The community directory supplies a listing of local services and information that give the user finger-touch access to communicate with local physicians, hospitals, or support groups directly from the kiosk. Although the community information screen is described as including local information, this description is made primarily to indicate that information is customized for particular local communities. The community information commonly also includes groups, individuals, or organizations that are national or international in scope.

The community listing directory typically includes a full listing for each entry. The health services and information system **100** also supports more extension coverage of a particular entry. For example, a health care provider, group, or other entity may arrange for one or more information pages or an expanded video presentation on the display **216**.

In some systems, a local bulletin board is supported and displayed on the health information kiosk **110** to supply information to employees of the organization supporting the kiosk. The bulletin board may be accessed via a selection on the community groups function or may be accessed in other ways.

Referring to **FIGURES 11A** and **11B**, pictorial computer screen displays illustrate a special coupons access display function. When the user is accessing the main menu screen **402** and actuates the "Shopping Mall" business access button **420**, the health services and information system software **120** displays a "Shopping Mall" business access menu screen **1100**, shown in **FIGURE 11A**. The "Shopping Mall" business access menu screen **1100** allows the user to access various advertisements, special offers, and coupons. Typically, accessed advertisements, offers, and coupons are viewed and printed by the user, if desired. The accessible selections can include standard entries or can be customized for a particular location and to support selected

advertisers or clients associated with the health information kiosk **110**. The illustrative "Shopping Mall" business access menu screen **1100** includes touch buttons to access pharmacy items **1102**, groceries **1104**, household items **1106**, and mail order specials **1108**. **FIGURE 11B** depicts a grocery coupon screen **1110** that can be displayed when user actuates the touch button for the groceries **1104**. The grocery coupon screen **1110** includes touch buttons that the user can actuate to receive printed grocery coupons, advertisements, and special offers. The coupons and informational materials are printed on the printer **220** when requested by the user.

Coupons can be printed from the health information kiosk **110**, permitting point-of-purchase advertising and usage of seasonal specials. A mail-order program effectively expands the floor-space of a store using e-commerce by offering hundreds or thousands of additional products or services that a customer can order directly from the health information kiosk **110**. The user can order the products or services directly from the health information kiosk **110** and arrange for purchased items to be made available for delivery at the kiosk location or delivered to the user. The "Shopping Mall" business access display function permits advertising using full motion commercials and coupons at a fraction of the cost of other media sources. The health services and information system **100** also supports online ordering for supported clients.

The health services and information system software **120** generates similar screens for accessing informational and ordering materials for purchases of vitamin and mineral supplements via a vitamins and minerals selection button **422**. Information on vitamins, herbs, and minerals is available at a touch of the display screen. The information includes various remedies, studies, and documented interactions of concurrent remedies.

When the user actuates the blood pressure history button **424**, the health services and information system software **120** displays a blood pressure history access screen **1200**, shown in **FIGURE 12A**, that allows protected access to the users blood pressure history information. The blood pressure history is stored as a sequence of time and date entries in a memory accessed and written by the processor within the

health information kiosk **110**. Entries are identified with a particular user and protected against access of others by usage of a PIN number or ID card. Upon identification of a user, the user can retrieve records from previous tests.

The blood pressure history access screen **1200** includes a numerical touch button pad that permits the user to enter an access number such as a social security number, a password, a PIN number, or the like. A system that utilizes personal identification numbers (PIN), the PIN number may be assigned according to a workplace (corporate) account, a store account at which the user is a customer, or a customer account assigned directly to the user.

In the illustrative health services and information system software **120**, the user enters a Personal Identification Number (PIN) and/or inserts an access card and enters a PIN number to access the blood pressure history data. Also in the illustrative system, local memory of the health information kiosk **110** stores the most recent ten results. The user may select any desired result or group of results, including statistics that are derived from the results.

Blood pressure test results for the patient are displayed in **FIGURE 12B**.

The health services and information system **100** collects and stores data for a plurality of users and generates overall average and trend information from the collective data, while maintaining the privacy of individual users. Various parties may use the collective data to supply inventory information, marketing studies, business planning, and the like. For example, parties using the collective data may include the store or facility in which the health information kiosk **110** is located, suppliers of medications and supplements, health care providers, insurers, and the like. Referring to **FIGUREs 13A**, **13B**, and **13C**, several schematic graphs are depicted which show collective user health data. **FIGURE 13A** shows a graph of health risk appraisal scores and data, according to gender, **FIGURE 13B** shows a graph of health risk appraisal value according to smoking habits. **FIGURE 13C** shows a graph of systolic and diastolic blood pressure. The illustrative graphs exemplify only a few of a myriad of possible statistical displays that may be displayed, as is known by those having ordinary skill in the art.

The health services and information system **100** stores and categorizes data from a user according to identification number. Stored data can be accessed for usage by commonly available spreadsheet software programs for review or presentation. Data may be stored according to identification number, data and time, or other arrangement.

Referring to **FIGURE 14**, an example of a table show a compilation of acquired samples of health care data that can be generated by the health services and information system **100**. The table is a compilation of the sequential transactions executed by the health services and information system **100** over a real time interval.

Referring to **FIGURE 15**, an example of a test printout **1500** shows data that can be produced by the health services and information system **100** for access by a user. The kiosk produces a personal waveform printout with a blood pressure result printout **1502** when the user actuates the print button on the blood pressure testing end screen **520** to show the blood pressure result. A health risk appraisal result printout **1504** is generated by the health services and information system **100** when the user actuates the print button from the health care appraisal result screen **720**. A blood pressure history result printout **1506** is produced when the user actuates the print button from the blood pressure history access screen **1200**.

The user can actuate the Personal Health Site button **428** on the main menu screen **402** shown in **FIGURE 4** to store and access a secure personal health history. The user enters identifying information on a touch-screen display **1600**, shown in **FIGURE 16**, that is displayed following actuation of the Personal Health Site button **428**. PIN numbers or other security measures secure patient information and prevent unauthorized access to confidential information.

In some systems, the user can be automatically connected to a proprietary web site after registration with the site. **FIGURE 17** is a schematic screen display that illustrates a registration form for a web site.

The user can actuate the weighing function request button **426** on the main menu screen **402**, shown in **FIGURE 4**, to activate the weight scale formed into the

seat of the kiosk. The user reads the result from a weight measurement result screen **1800** shown in **FIGURE 18**.

While the invention has been described with reference to various embodiments, it will be understood that these embodiments are illustrative and that the scope of the invention is not limited to them. Many variations, modifications, additions and improvements of the embodiments described are possible. For example, those skilled in the art will readily implement the steps necessary to provide the structures and methods disclosed herein, and will understand that the process parameters, materials, and dimensions are given by way of example only and can be varied to achieve the desired structure as well as modifications which are within the scope of the invention. Variations and modifications of the embodiments disclosed herein may be made based on the description set forth herein, without departing from the scope and spirit of the invention as set forth in the following claims.

In the claims, unless otherwise indicated the article "a" is to refer to "one or more than one".

Do not fold or staple

WHAT IS CLAIMED IS:

1. A health services and information system comprising:

a controller;

local storage coupled to the controller;

a health test interface coupled to the controller, the controller including logic for controlling the health test interface to perform a health test measurement giving a health care test result for a user, the controller including logic for controlling storage of the health care test result in the local storage in a storage element allocated for the user; and

a communications interface coupled to the controller, the controller being capable of communicating with a remote server with a remote storage via the communications interface, the controller including logic for controlling storage of the health care test result in the remote storage in a storage element allocated for the user.

2. A health services and information system according to Claim 1 further comprising:

a display coupled to the controller, the controller including a logic for controlling presentation of the health care results on the display including a presentation of a health care result history.

3. A health services and information system according to Claim 1 further comprising:

a display coupled to the controller, the controller including a logic for controlling presentation of the health care results on the display including a presentation of a health risk appraisal.

4. A health services and information system according to Claim 1 wherein:

the health test interface is an interface for testing blood pressure and heart rate.

5. A health services and information system according to Claim 1 further comprising:

a measurement interface coupled to the controller, the controller including logic for controlling the measurement interface to perform a measurement giving a measurement result for a user, the controller including logic for controlling storage of the measurement result in the local storage in a storage element allocated for the user.

6. A health services and information system according to Claim 1 further comprising:

a measurement interface coupled to the controller, the controller including logic for controlling the measurement interface to perform a weight measurement giving a weight measurement result for a user, the controller including logic for controlling storage of the weight measurement result in the local storage in a storage element allocated for the user.

7. A health services and information system according to Claim 1 further comprising:

a display coupled to the controller; and

a user interface coupled to the controller, the controller including logic for controlling the display and the user interface to execute an interactive information transfer session in which the user supplies user information for storage and retrieval to the local storage and the remote storage, the user information being used for analysis in generating a health risk appraisal.

8. A health services and information system according to Claim 1 further comprising:

a logic at least partly executable on the controller that secures data in the user local storage and the user remote storage against unauthorized access.

9. A health services and information system according to Claim 1 further comprising:

a kiosk that houses the controller, the local storage, the communications interface, and the health test interface.

10. A health services and information system according to Claim 1 further comprising:

a logic at least partly executable on the controller that automatically transfers data in the local storage to the remote storage.

11. A health services and information system according to Claim 1 further comprising:

the remote server that is capable of being communicatively coupled to the controller via the communications interface; and

a logic at least partly executable on the controller and at least partly executable on the remote server that permits the server to present health service directories and health care information to the user during an interactive accessing operation.

12. A health services and information system according to Claim 1 further comprising:

the remote server that is capable of being communicatively coupled to the controller via the communications interface; and

a logic at least partly executable on the controller and at least partly executable on the remote server that permits the server to present health care services and products for purchase in electronic-commerce to the user during an interactive accessing operation.

13. A health services and information system according to Claim 1 further comprising:

the remote server that is capable of being communicatively coupled to the controller via the communications interface; and

a logic at least partly executable on the controller and at least partly executable on the remote server that determines whether a medication selected by the user is compatible with medications that the user is currently taking.

14. A health services and information system comprising:

a server;

a server storage coupled to the server, the server being capable of storing health care test results and measurements for a plurality of users in storage elements allocated to the users; and

a communications interface coupled to the server, the server being capable of communicating with one or more health care kiosks via the communications interface to transfer health care test results and measurements from the health care kiosks to the server and to transfer health care information from network information sources to the health care kiosks.

15. A health services and information system according to Claim 14 wherein:

the server transfers information to the health care kiosks relating to a health care result history of the users.

16. A health services and information system according to Claim 14 wherein:

the server transfers information to the health care kiosks relating to a health risk appraisal of the users.

17. A health services and information system according to Claim 14 wherein:

the server storage is capable of storing information including user blood pressure and user heart rate.

18. A health services and information system according to Claim 14 further comprising:

the server storage is capable of storing information including user body weight.

19. A health services and information system according to Claim 14 wherein:

the server receives and stores health care test results and measurements from the health care kiosks and receives and stores health care information from network information, the stored health care test results and measurements the stored health care information being used to determine a health risk appraisal.

20. A health services and information system according to Claim 1 further comprising:

a logic at least partly executable in the server that secures data in the user remote storage against unauthorized access.

21. A health services and information system according to Claim 14 further comprising:

a kiosk that is capable of being communicatively coupled to the server via the communications interface; and

a logic at least partly executable in the server and at least partly executable in the kiosk that permits the server to present health service directories and health care information to the user during an interactive accessing operation.

22. A health services and information system according to Claim 14 further comprising:

a kiosk that is capable of being communicatively coupled to the server via the communications interface; and

a logic at least partly executable in the server and at least partly executable in the kiosk that permits the server to present health care services and products for purchase in electronic-commerce to the user during an interactive accessing operation.

23. A health services and information system according to Claim 14 further comprising:

a kiosk that is capable of being communicatively coupled to the server via the communications interface; and

a logic at least partly executable in the server and at least partly executable in the kiosk that determines whether a medication selected by the user is compatible with medications that the user is currently taking.

24. A method of operating a health services and information system including a controller and coupled to the controller a local storage, a health test interface, and a communications interface, the method comprising:

controlling the health test interface to perform a health test measurement giving a health care test result for a user;

controlling storage of the health care test result in the local storage in a storage element allocated for the user; and

communicating with a remote server with a remote storage via the communications interface; and

controlling storage of the health care test result in the remote storage in a storage element allocated for the user.

25. A method according to Claim 24 wherein the health services and information system further includes a display, the method further comprising:

presenting the health care results on the display including presenting a health care result history.

26. A method according to Claim 24 wherein the health services and information system further includes a display, the method further comprising:

presenting the health care results on the display including presenting a health risk appraisal.

27. A method according to Claim 24 wherein:

the health test is a measurement of blood pressure and heart rate.

28. A method according to Claim 24 wherein the health services and information system further includes a measurement interface, the method further comprising:

controlling the measurement interface to perform a measurement giving a measurement result for a user; and

controlling storage of the measurement result in the local storage in a storage element allocated for the user.

29. A method according to Claim 24 wherein the health services and information system further includes a measurement interface, the method further comprising:

controlling the measurement interface to perform a weight measurement giving a weight measurement result for a user; and

controlling storage of the measurement result in the local storage in a storage element allocated for the user.

30. A method according to Claim 24 wherein the health services and information system further includes a display and a user interface, the method further comprising:

controlling the display and the user interface to execute an interactive information transfer session in which the user supplies user information for storage and retrieval to the local storage and the remote storage, the user information being used for analysis in generating a health risk appraisal.

31. A method according to Claim 24 further comprising:

securing data in the user local storage and the user remote storage against unauthorized access.

32. A method according to Claim 24 further comprising:

automatically transferring data in the local storage to the remote storage.

33. A method according to Claim 24 further comprising:
communicatively coupling the remote server to the controller via the communications interface; and
presenting health service directories and health care information to the user during an interactive accessing operation.

34. A method according to Claim 24 further comprising:
communicatively coupling the remote server to the controller via the communications interface; and
presenting health care services and products for purchase in electronic-commerce to the user during an interactive accessing operation.

35. A method according to Claim 24 further comprising:
communicatively coupling the remote server to the controller via the communications interface; and
determining whether a medication selected by the user is compatible with medications that the user is currently taking.

HEALTH SERVICES AND INFORMATION SYSTEM

Charles Bluth and James Bluth

ABSTRACT OF THE DISCLOSURE

A health kiosk provides blood pressure testing, a health and fitness evaluation, and a medication encyclopedia. The health kiosk typically interfaces to a computer or server, such as a pharmacy computer or a remote server which compares pharmaceuticals selected by a user to information in the medication encyclopedia to determine compatibility for prescription medications and over-the-counter medications. In some systems, the kiosk also supplies one item or more of an extended health information, a weight scale constructed into the seat of the kiosk, a directory of health care service and product providers, an a directory of community health, support, and service groups.

Document Page 1 of 1 Synchronized

Docket No. 1576.1450

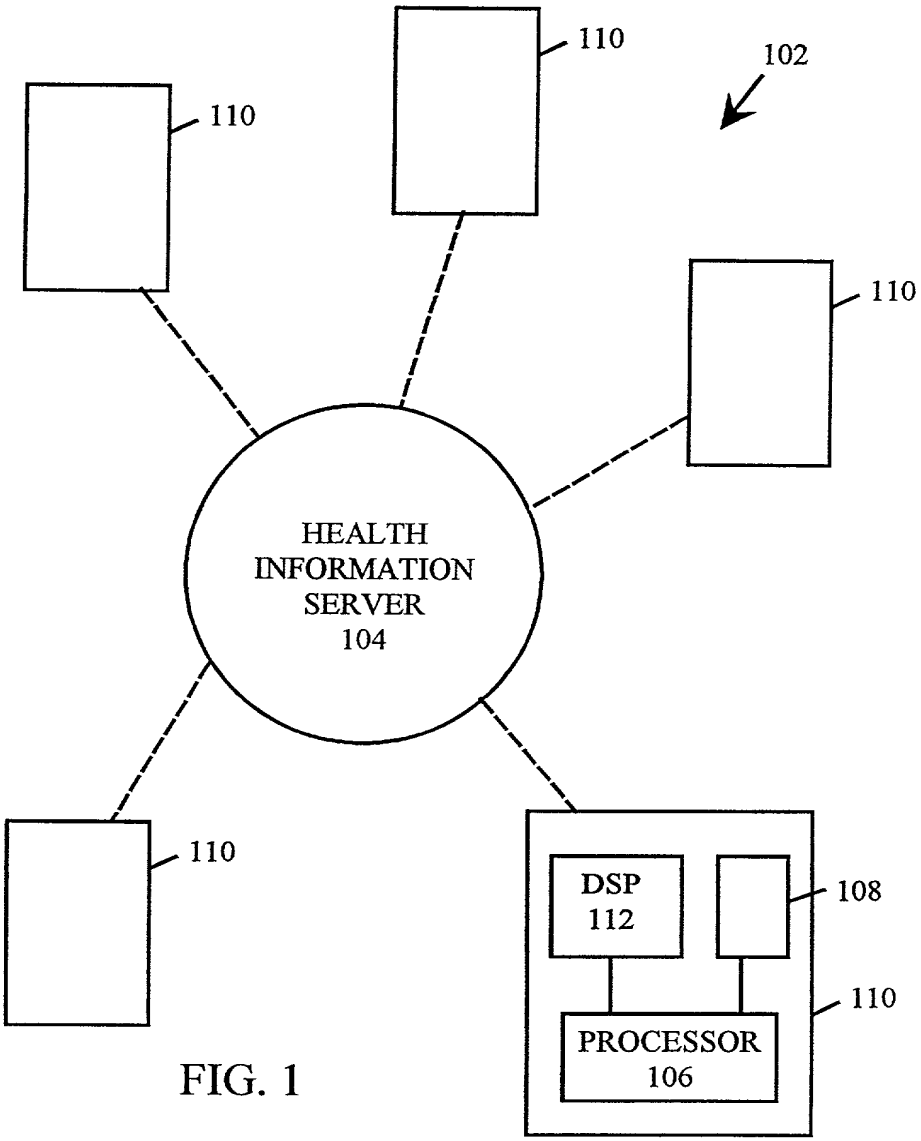


FIG. 1

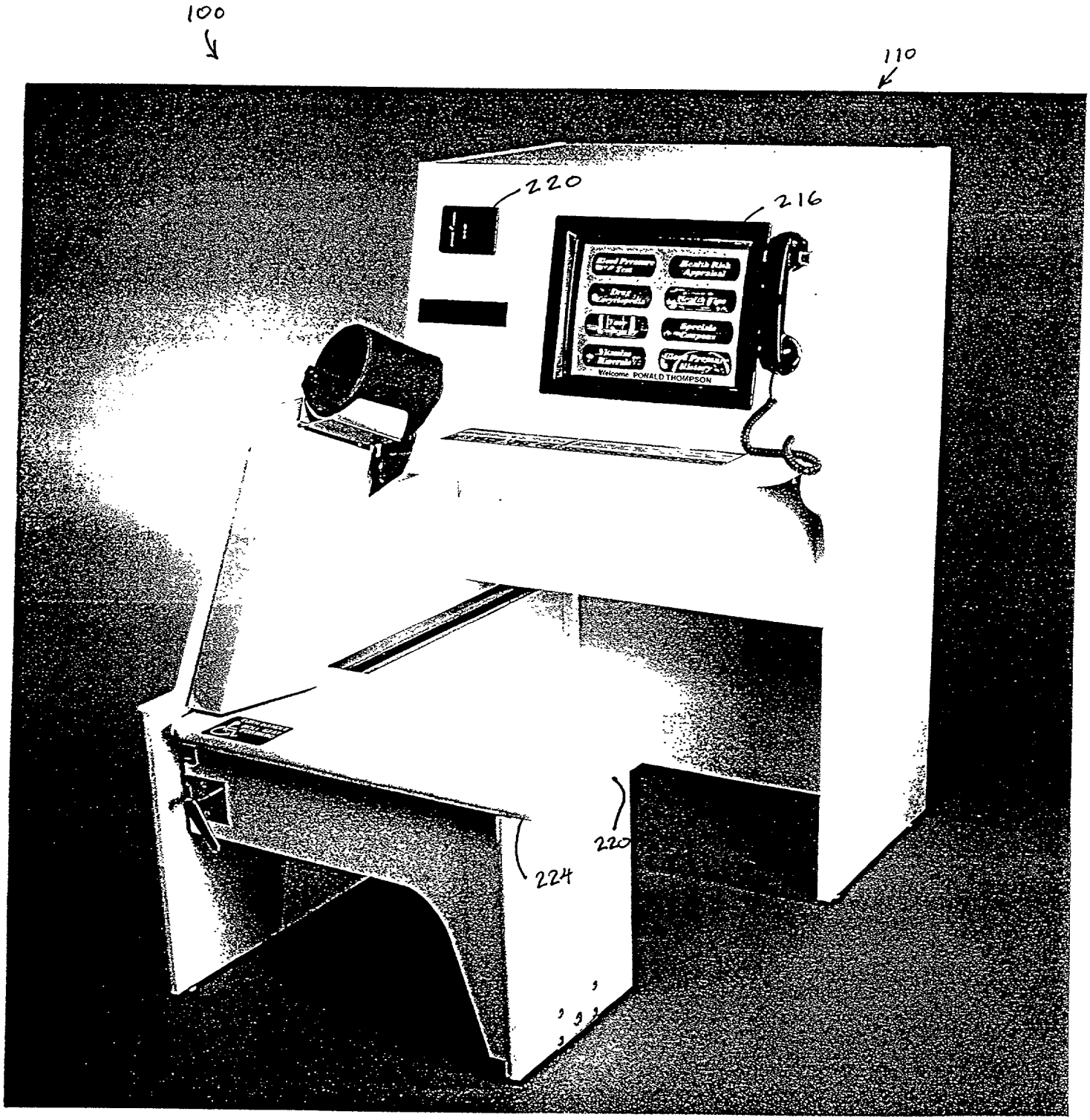


FIG. 2

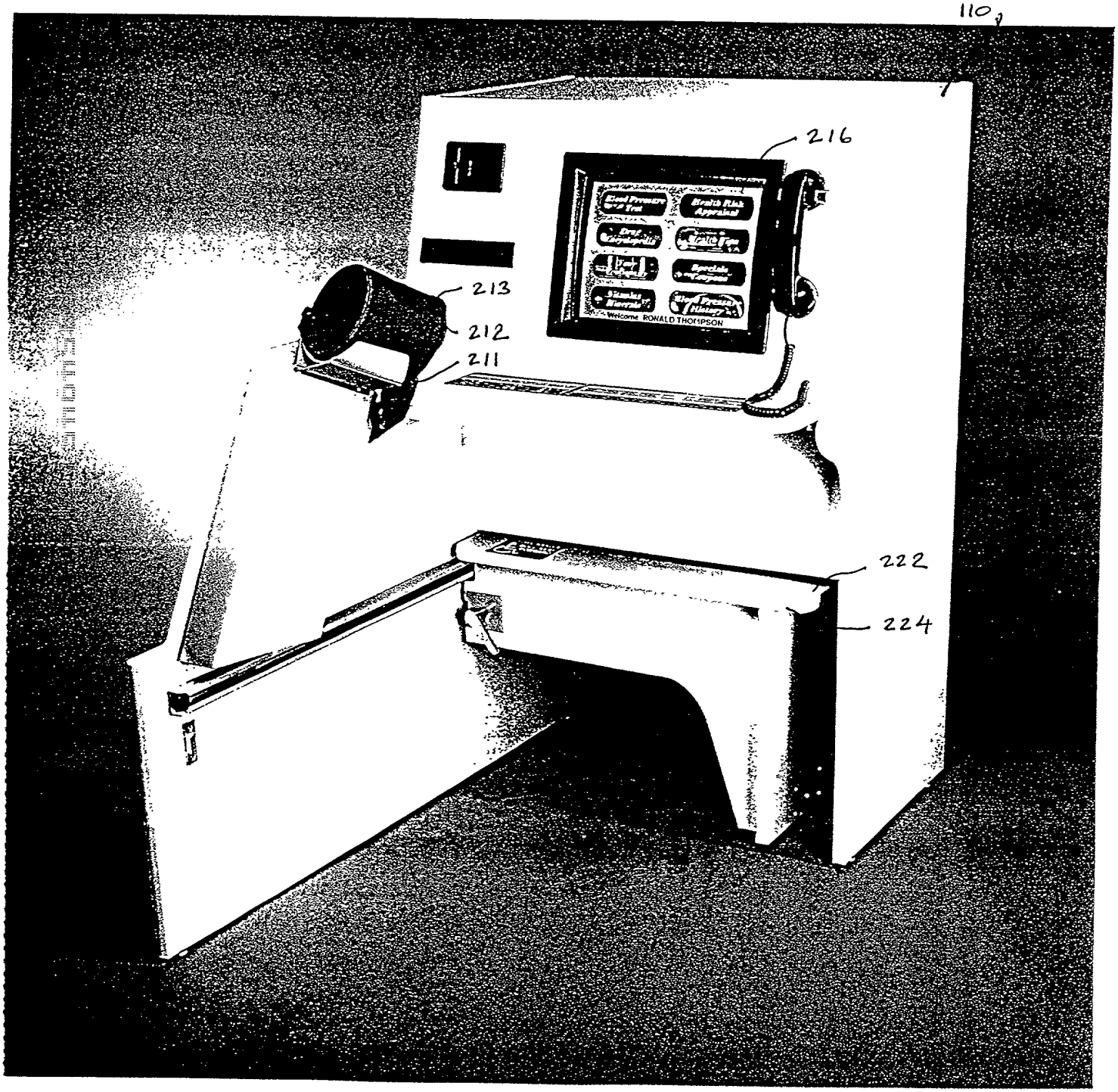


FIG. 3

402
410
Blood Pressure Test
416
Health Information
412
Health Risk Appraisal
414
Medication Encyclopedia
424
Blood Pressure History
418
Community Directory
426
Check Your Weight
420
Shopping Mall
428
Personal Health Site
422
Vitamins Minerals

FIG. 4

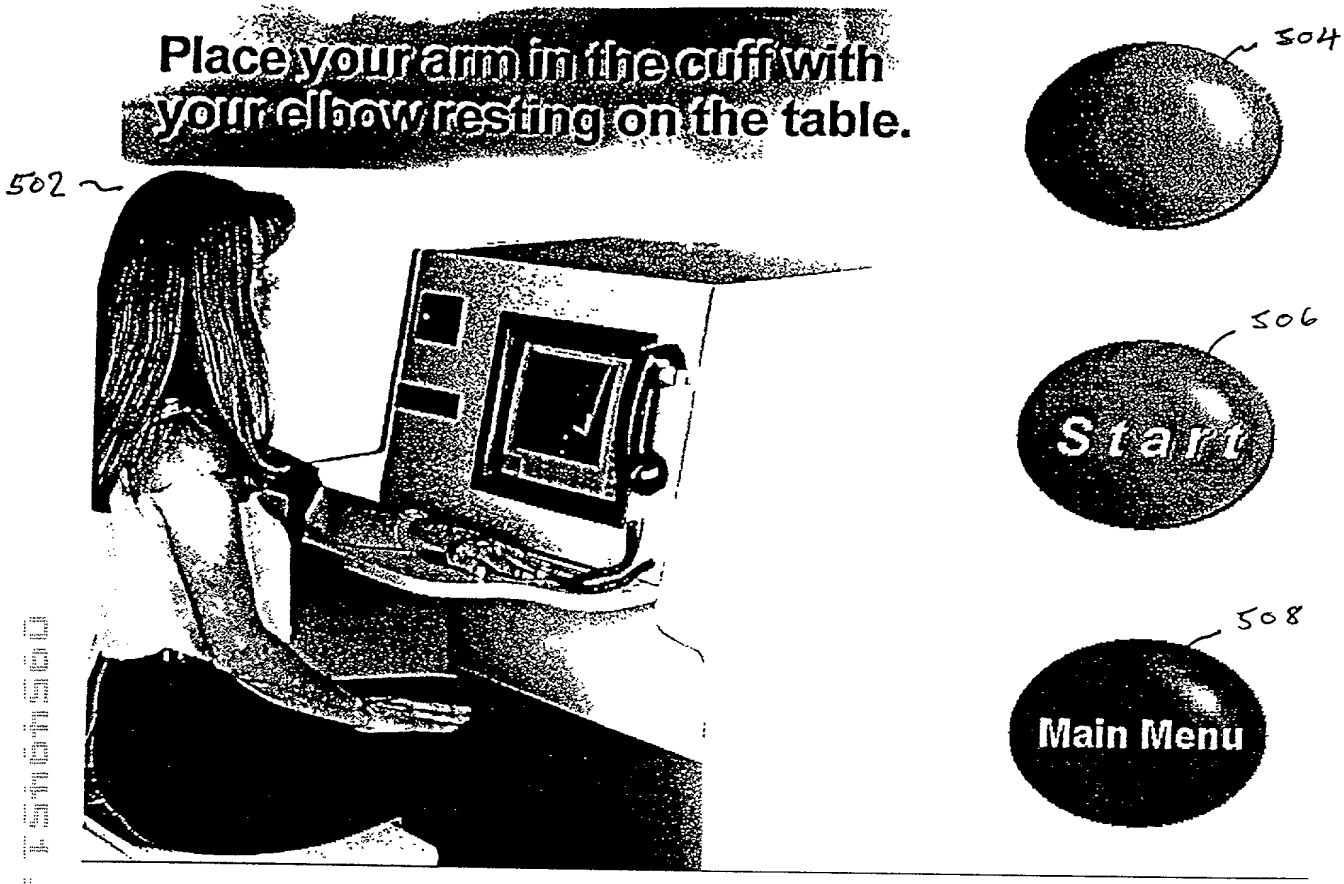

Place your arm in the cuff with your elbow resting on the table.
502
504
506
Start
508
Main Menu

FIG. 5A

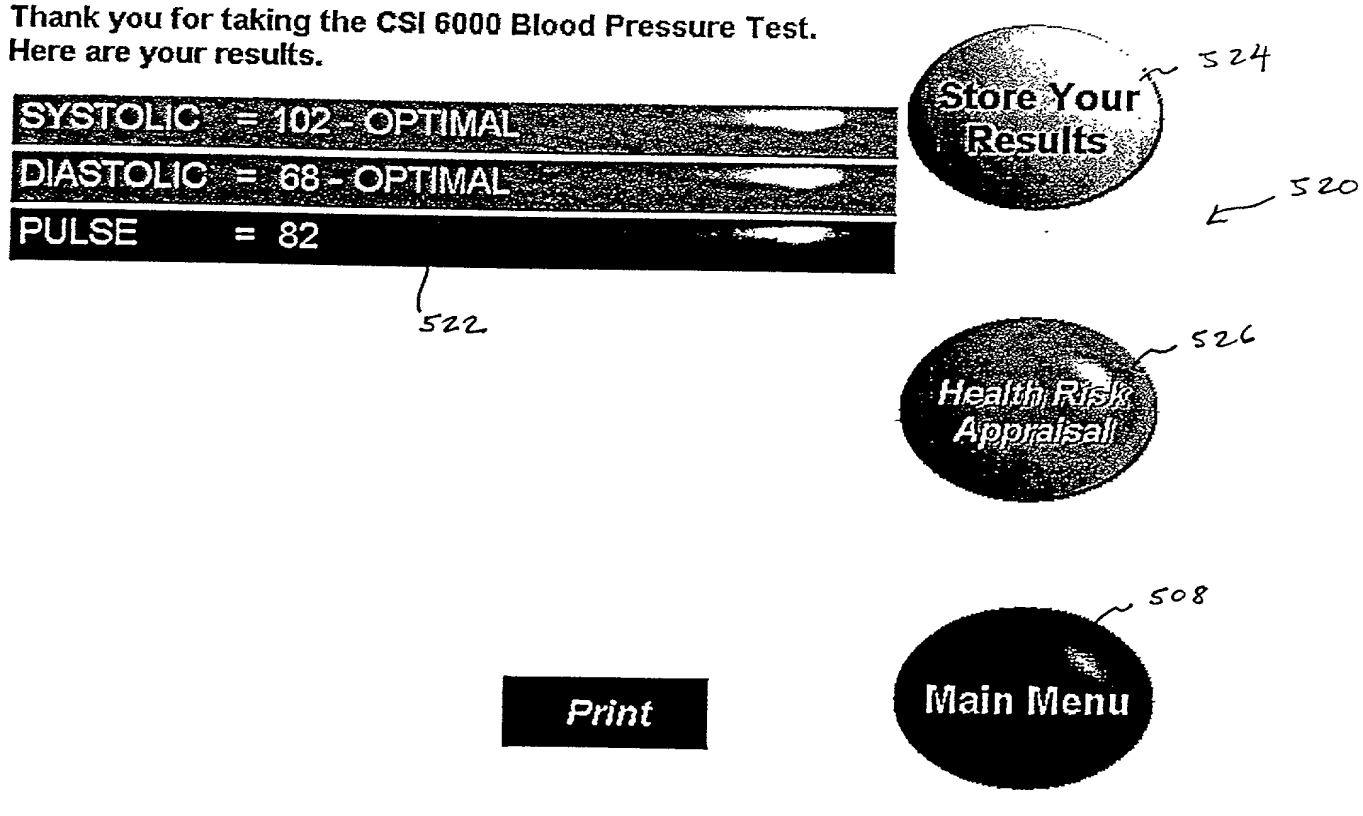
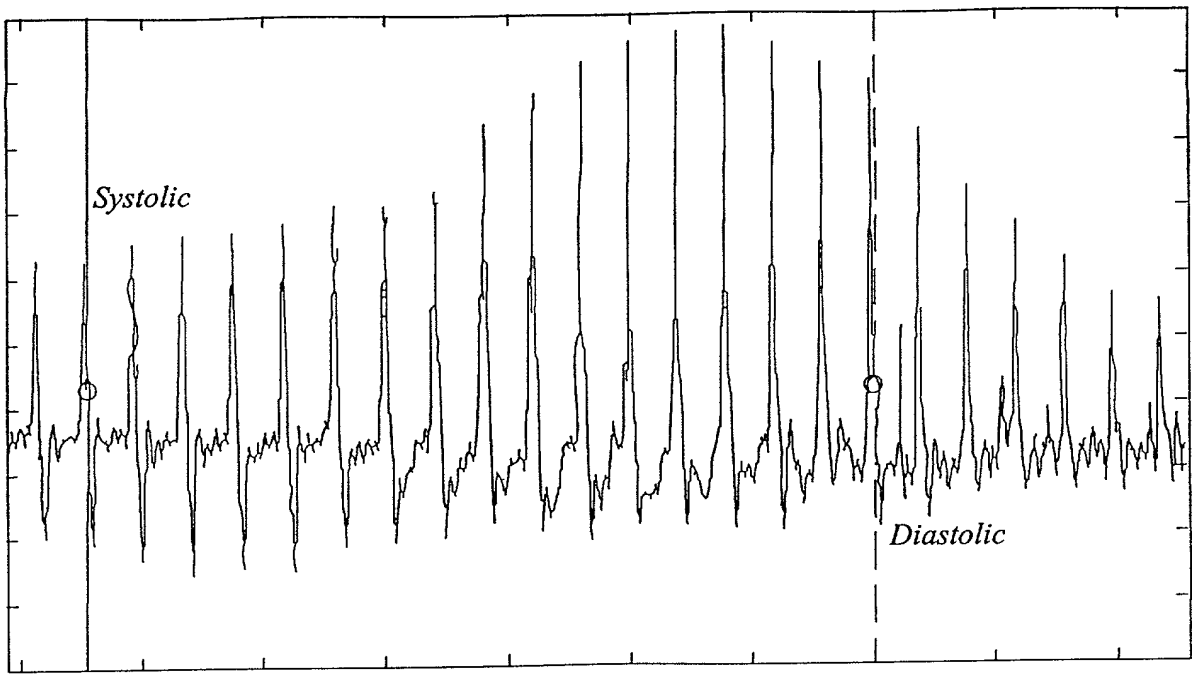

Thank you for taking the CSI 6000 Blood Pressure Test.
Here are your results.
SYSTOLIC = 102 - OPTIMAL
DIASTOLIC = 68 - OPTIMAL
PULSE = 82
522
524
Store Your Results
520
526
Health Risk Appraisal
508
Main Menu
Print

FIG. 5B



The Bell Curve of an actual blood pressure wave.

FIG. 6A

FIG. 6B

Above: A magnified section of the blood pressure wave.

Below: The Pressure wave form.

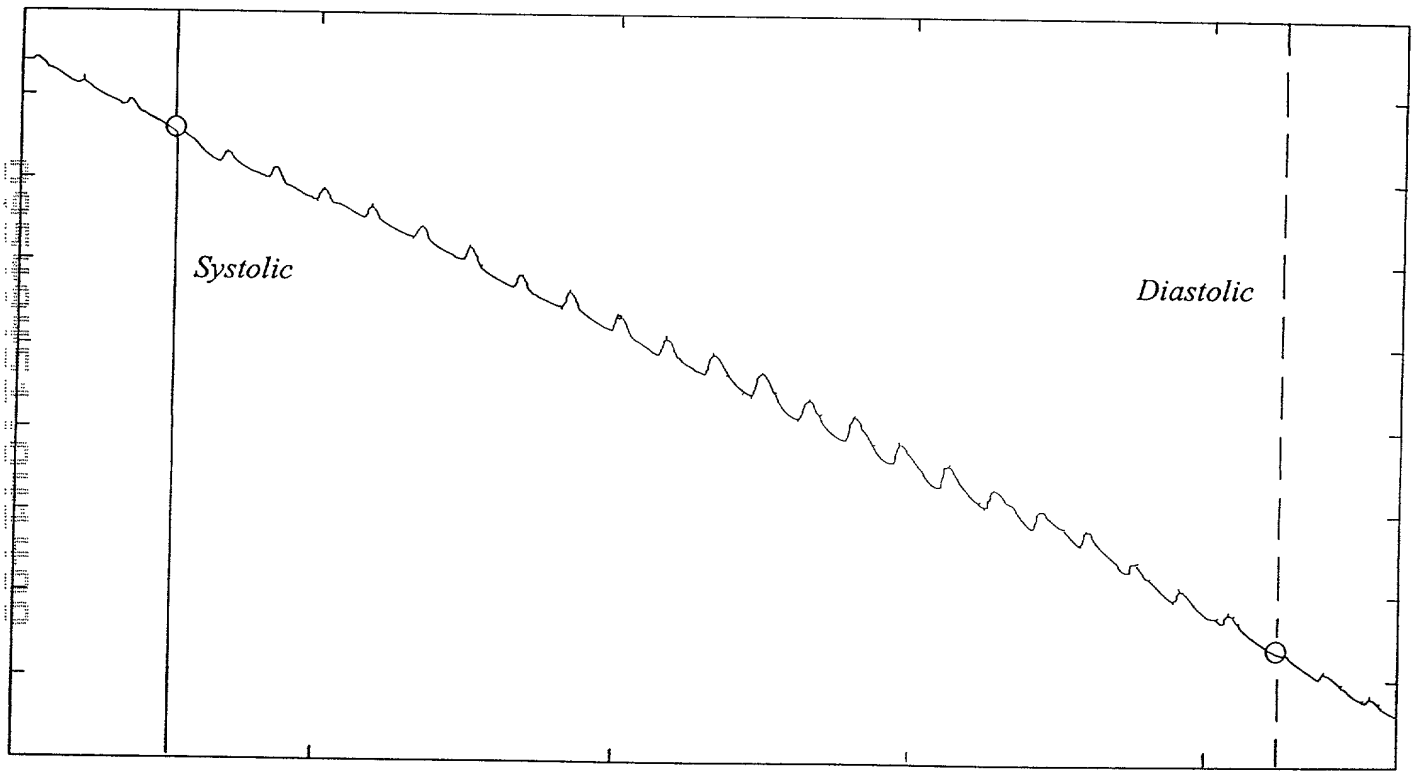
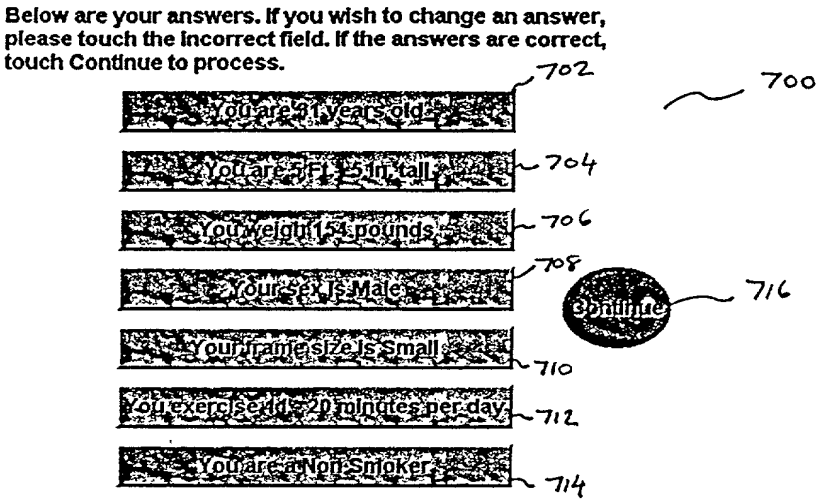


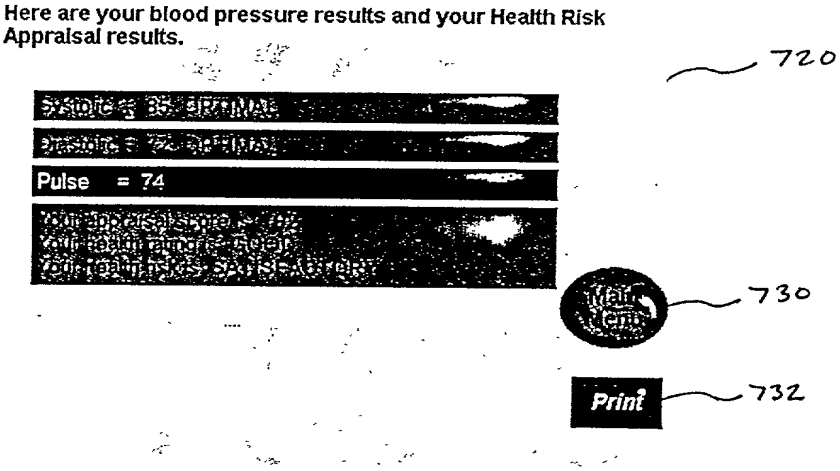
FIG. 6C

FIG. 7A



Health Risk Appraisal Answers

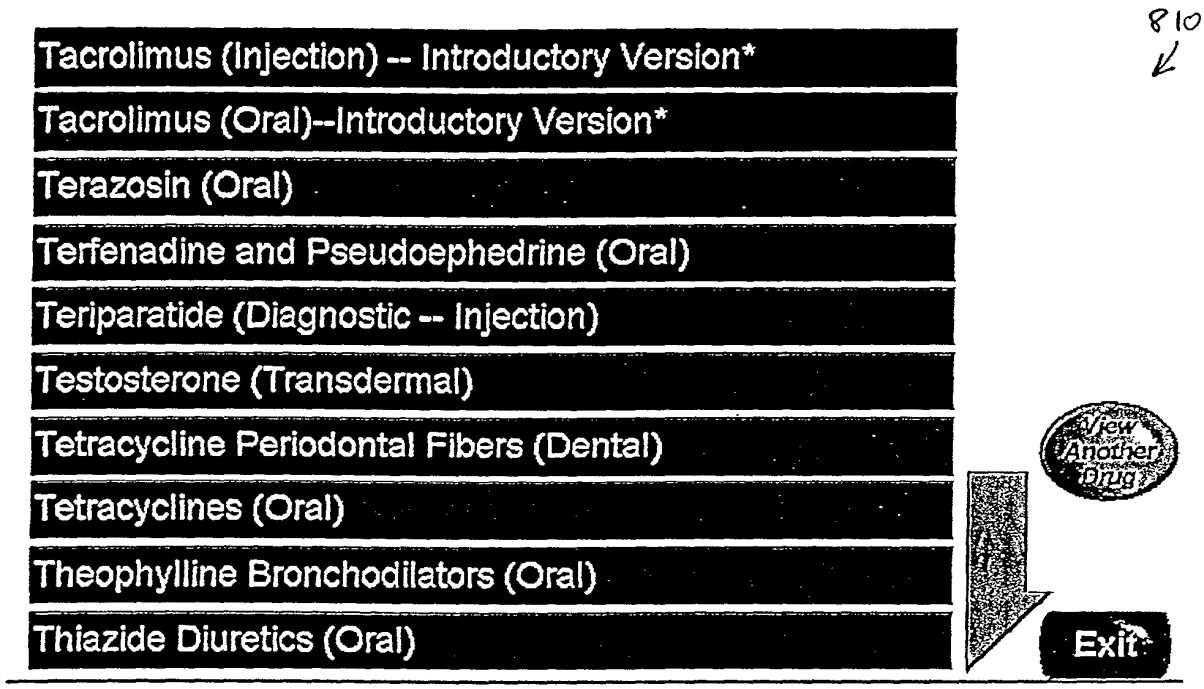
FIG. 7B



Blood Pressure and Health Risk Appraisal Results

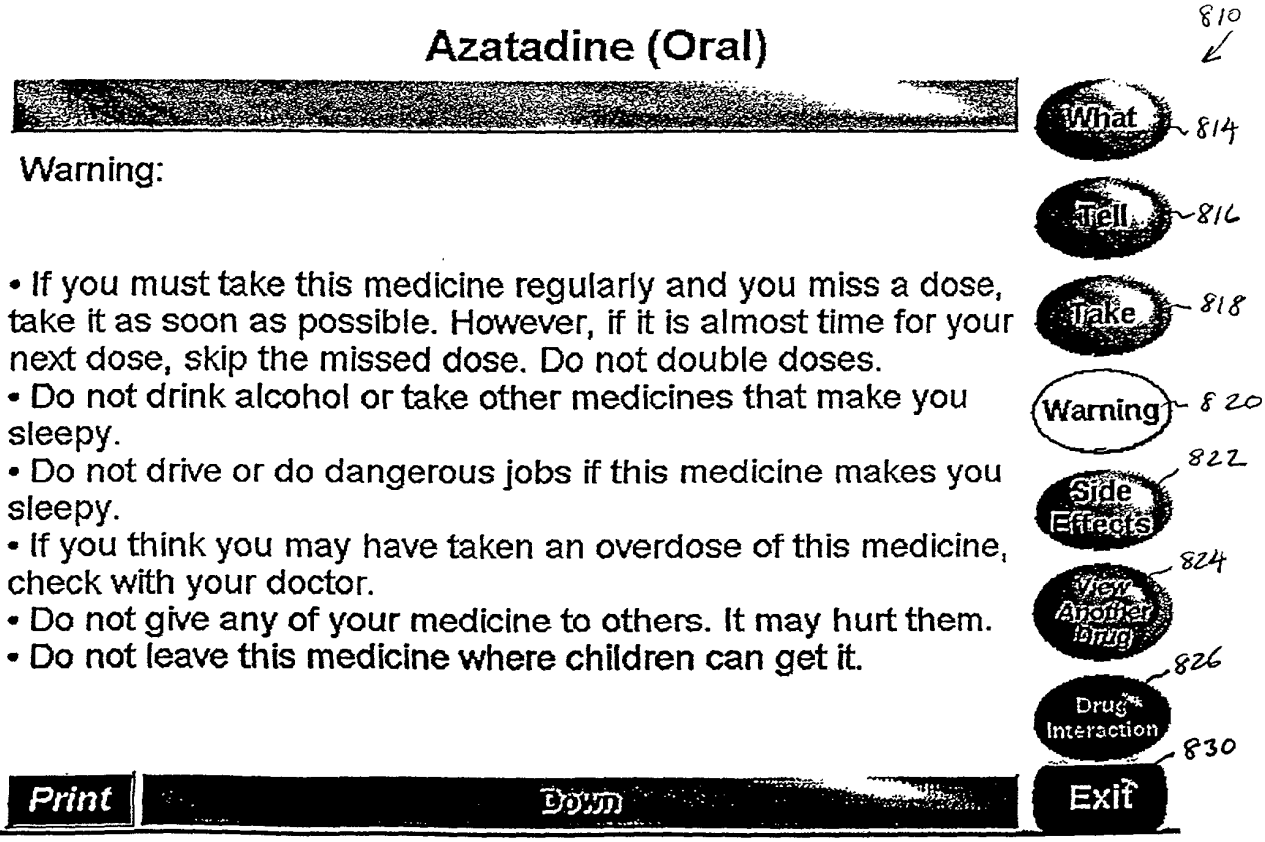
Please touch a selected drug.

TTT



810

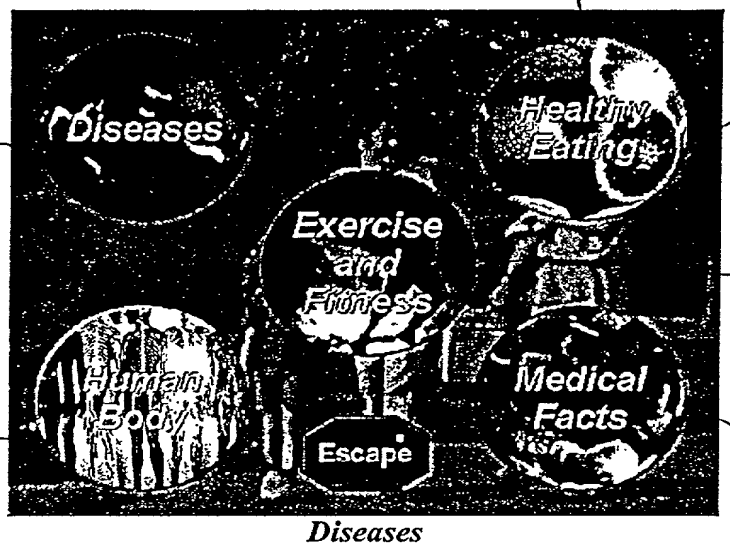
FIG. 8A



810
814
816
818
820
822
824
826
830

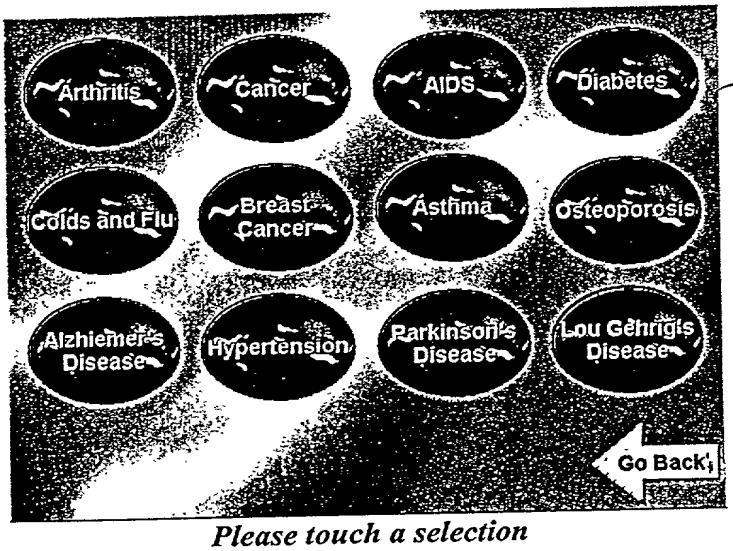
FIG. 8B

FIG. 9A



Diseases

FIG. 9B



Please touch a selection

FIG. 10A

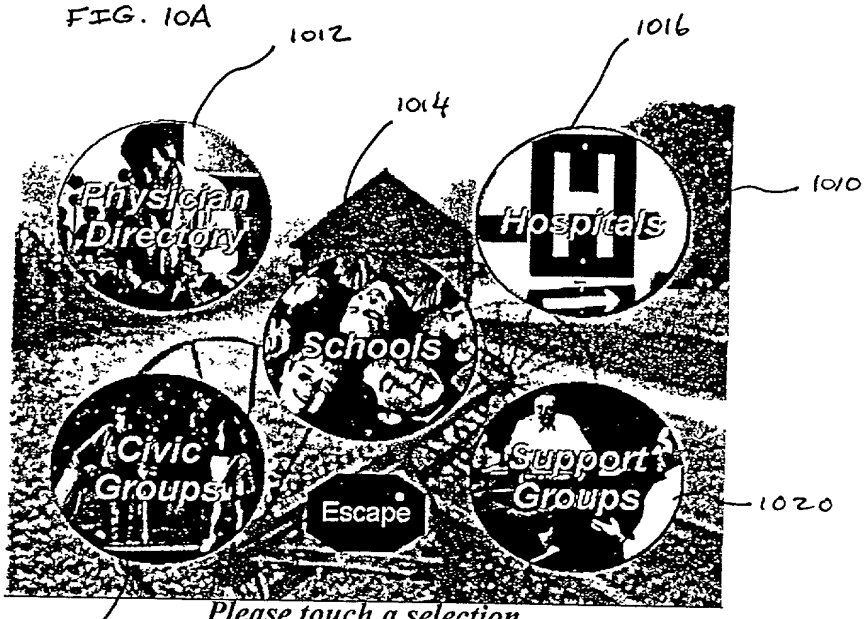
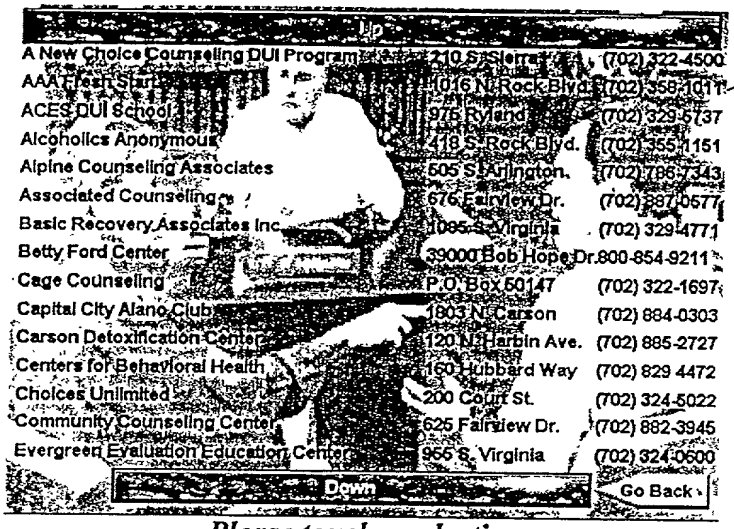


FIG. 10B

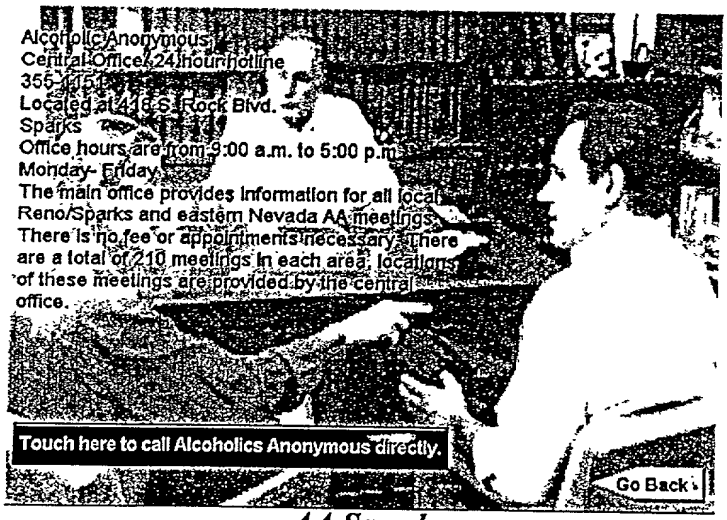
FIG. 10C



1034

Please touch a selection

FIG. 10D



AA Sample

FIG. 11A

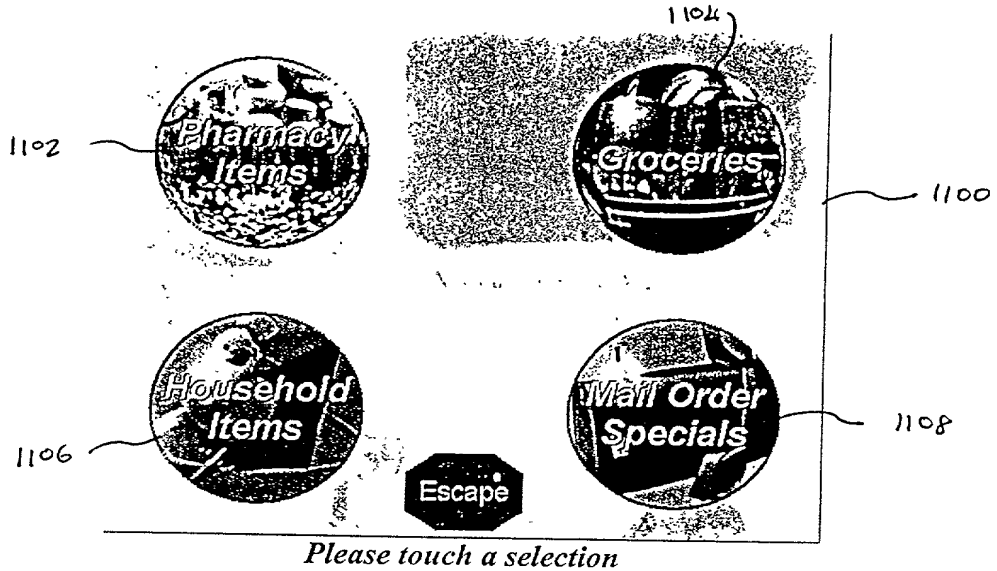
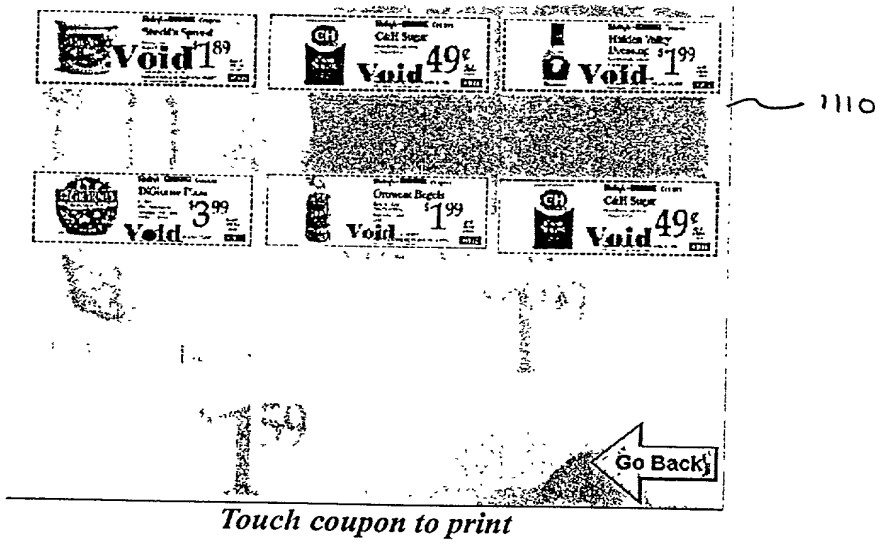


FIG. 11B



To retrieve your Blood Pressure History, please enter your Social Security number. Touch Enter when done.

~1200

555-55-5555

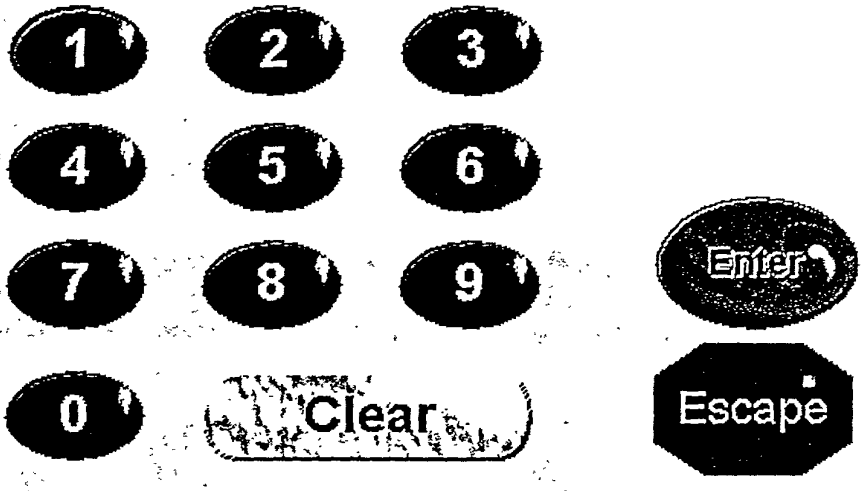


FIG. 12A

Blood Pressure History for: 549-27-2771

1200

SYSTOLIC	DIASTOLIC	PULSE	TIME	DATE
109	81	96	11:18	04-08-00
118	79	73	09:59	03-21-00
120	79	62	12:04	01-29-00
132	81	83	11:16	01-20-00
133	73	81	10:52	01-20-00
120	77	75	15:06	01-14-00
138	99	74	10:22	01-07-00
154	96	81	09:46	01-07-00
140	84	94	09:25	01-07-00
124	83	68	15:01	12-09-99

Print

Escape

Docket No. 5754.2CD

FIG. 12B

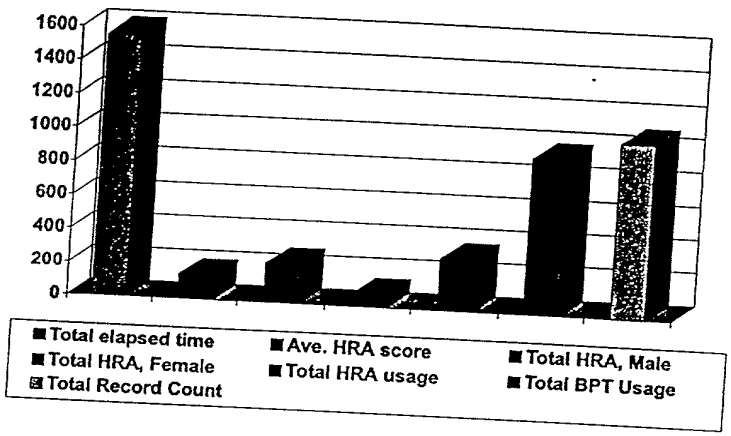
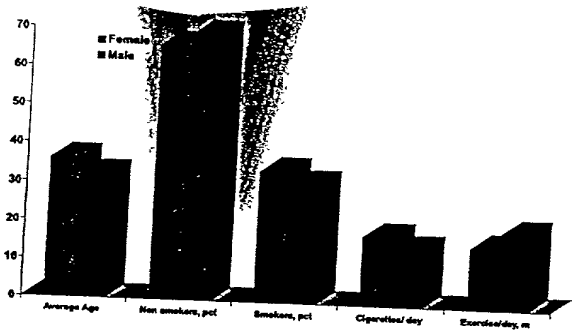


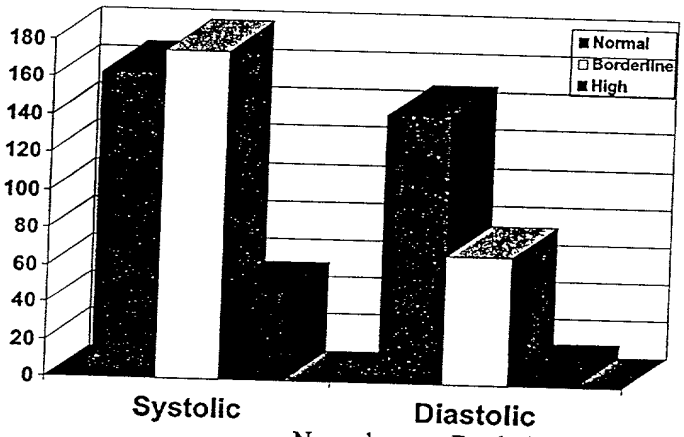
FIG. 13A



Health Risk Appraisal Response

FIG. 13B

Total Systolic & Diastolic



	Normal	Borderline	High
Total Systolic	163	175	48
Total Diastolic	143	69	7

FIG. 13C

Rec	Yr	Mo	Dy	Hr	Mn	Sy	Di	Pu	BPx	Sx	Ag	Ht	Wt	Ex	Sk	Fs	BPT	HRA	BB3	BB4	ET
1	96	11	11	20	29	107	69	57	1	0	0	0	0	0	0	0	1	0	0	0	1:20
2	96	11	22	22	43	97	66	75	1	0	0	0	0	0	0	0	1	0	0	0	1:10
3	96	11	5	20	22	112	66	76	1	0	0	0	0	0	0	0	1	0	0	0	0:59
4	96	11	5	20	21	106	66	82	1	1	22	68	135	2	1	1	0	0	0	0	1:47
5	96	11	5	20	29	119	67	79	1	0	0	0	0	0	0	0	1	0	0	0	0:52
6	96	11	5	20	25	118	66	83	1	0	0	0	0	0	0	0	1	0	0	0	0:54
7	96	11	5	20	23	118	64	92	1	0	0	0	0	0	0	0	1	0	0	0	0:53
8	96	11	20	1	16	108	68	72	1	0	0	0	0	0	0	0	1	0	0	0	1:26
9	96	11	24	17	59	117	69	86	1	0	0	0	0	0	0	0	0	0	0	0	1:15
10	96	11	26	18	39	111	77	83	1	0	0	0	0	0	0	0	1	0	0	0	1:32
11	96	12	3	16	45	104	69	64	1	0	0	0	0	0	0	0	0	0	0	0	1:15
12	96	11	24	13	43	114	72	66	1	1	48	72	180	3	1	2	1	0	0	0	3:03
13	96	11	18	18	7	113	69	80	1	0	0	0	0	0	0	0	0	0	0	0	1:17
14	96	12	4	0	26	111	69	81	1	0	0	0	0	0	0	0	1	0	0	0	1:19
15	96	12	2	1	50	103	66	89	1	0	0	0	0	0	0	0	1	0	0	0	1:36
16	96	11	25	2	49	111	71	71	1	0	0	0	0	0	0	0	1	0	0	0	1:34
17	96	11	20	16	59	111	67	74	1	0	0	0	0	0	0	0	1	0	0	0	1:32
18	96	12	1	2	10	118	77	57	1	0	0	0	0	0	0	0	1	0	0	0	0:59
19	96	11	17	2	4	116	72	83	1	0	0	0	0	0	0	0	1	0	0	0	1:01
20	96	11	16	20	47	111	73	74	1	1	30	72	216	3	1	3	1	0	0	0	2:03
21	96	11	20	13	21	109	69	81	1	1	30	72	215	3	1	3	1	0	0	0	1:59
22	96	12	4	8	25	93	72	68	1	0	0	0	0	0	0	0	0	0	0	0	1:18
23	96	12	2	2	9	116	72	77	1	0	0	0	0	0	0	0	1	0	0	0	1:01
24	96	11	21	14	26	84	67	0	1	0	0	0	0	0	0	0	0	0	0	0	0:59
25	96	11	13	15	51	119	69	63	1	1	30	72	215	3	1	3	1	0	0	0	2:23
26	96	11	28	8	1	104	67	79	1	1	30	72	216	4	1	3	1	0	0	0	2:10
27	96	11	18	1	12	115	72	69	1	1	30	72	215	3	1	3	1	0	0	0	2:00
28	96	11	30	17	44	108	69	78	1	0	0	0	0	0	0	0	1	0	0	0	0:57
29	96	11	18	22	55	104	69	87	1	0	0	0	0	0	0	0	1	0	1	1	1:28
30	96	11	25	9	9	119	65	81	1	0	0	0	0	0	0	0	0	0	0	0	1:20
31	96	11	22	11	22	119	66	66	1	1	23	0	167	3	1	2	1	1	0	0	2:21
32	96	11	23	1	13	86	69	0	1	0	0	0	0	0	0	0	1	0	0	0	1:01
33	96	11	22	18	9	101	66	78	1	0	0	0	0	0	0	0	1	0	0	0	1:19

FIG. 14

09540451 .041400

Example: Test Printouts

BP RESULTS 1502

YOUR BLOOD PRESSURE TEST HAS BEEN COMPLETED. HERE ARE THE RESULTS.

SYSTOLIC = 112 - OPTIMAL
DIASTOLIC = 71 - OPTIMAL
PULSE = 65

05-10-1997 14:16:54

Thank you for visiting the CSI6000.

1500

HRA RESULTS 1504

HERE ARE YOUR HEALTH RISK APPRAISAL RESULTS.

YOUR SCORE IS: 95

RATED AS: EXCELLENT

YOUR HEALTH RISK IS: VERY LOW

05-10-1997 14:17:36

Thank you for visiting the CSI6000.

BLOOD PRESSURE HISTORY FOR 555-55-5555 1506

SYS	DIA	PULSE	TIME	DATE
112	71	65	14:16	05-10-97
110	86	90	13:04	05-10-97
115	66	64	12:34	05-10-97
118	79	66	15:49	04-02-97
130	69	66	14:37	04-01-97
152	110	93	08:43	04-01-97
144	96	80	14:54	03-28-97
163	78	80	10:27	03-28-97

05-10-1997 14:18:05

Thank you for visiting the CSI6000.

FIG. 15

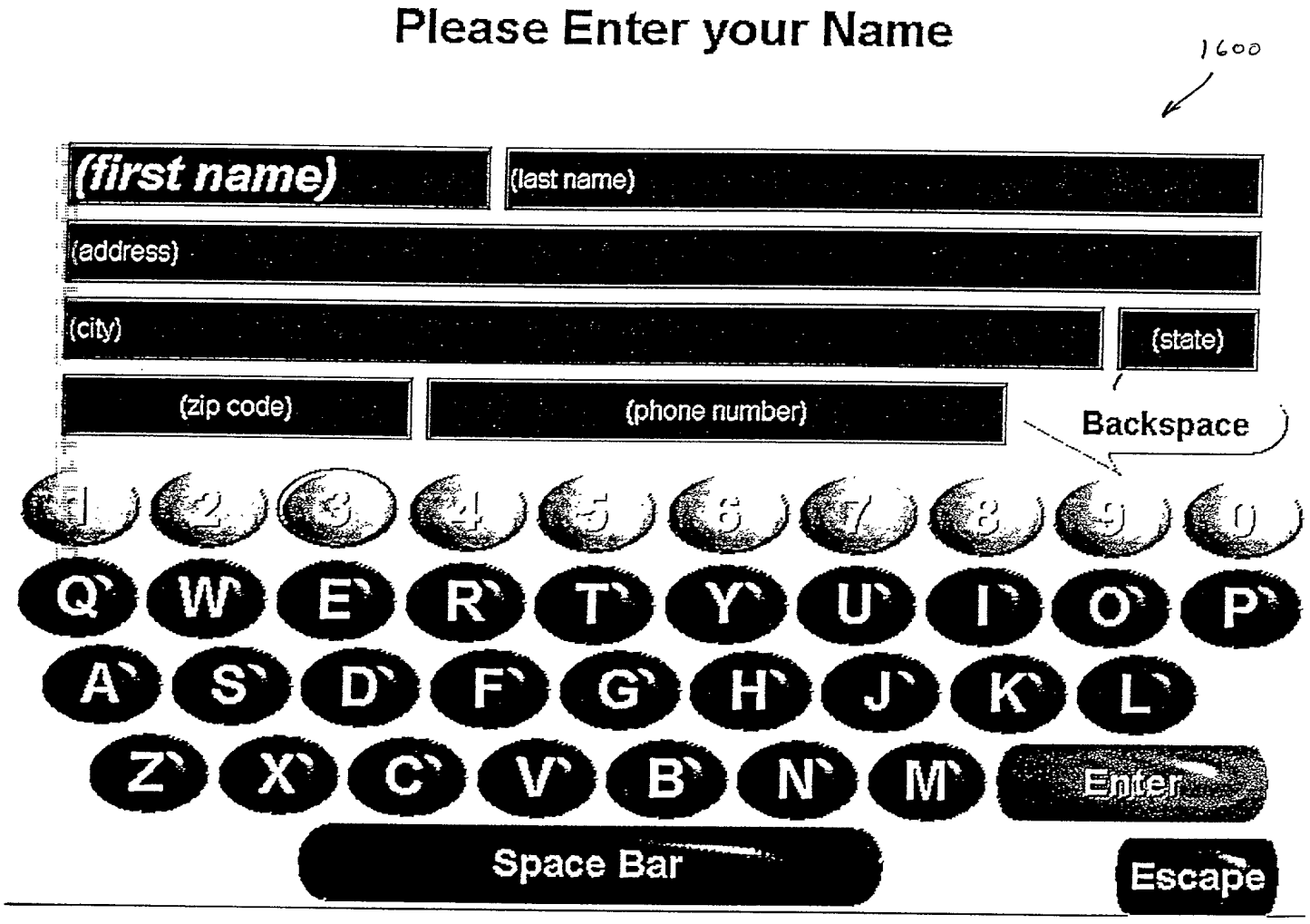

Please Enter your Name
1600
(first name)
(last name)
(address)
(city)
(state)
(zip code)
(phone number)
Backspace
1 2 3 4 5 6 7 8 9 0
Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
Enter
Space Bar
Escape

FIG. 16

Exit
Back
Forward
www.computerized-screening.com
Secure Personal Health Site
CSI HealthNet.Com
Registration Form
Email
First Name
Last Name
Address 1
Address 2
City
State
Zip

FIG. 17

1800

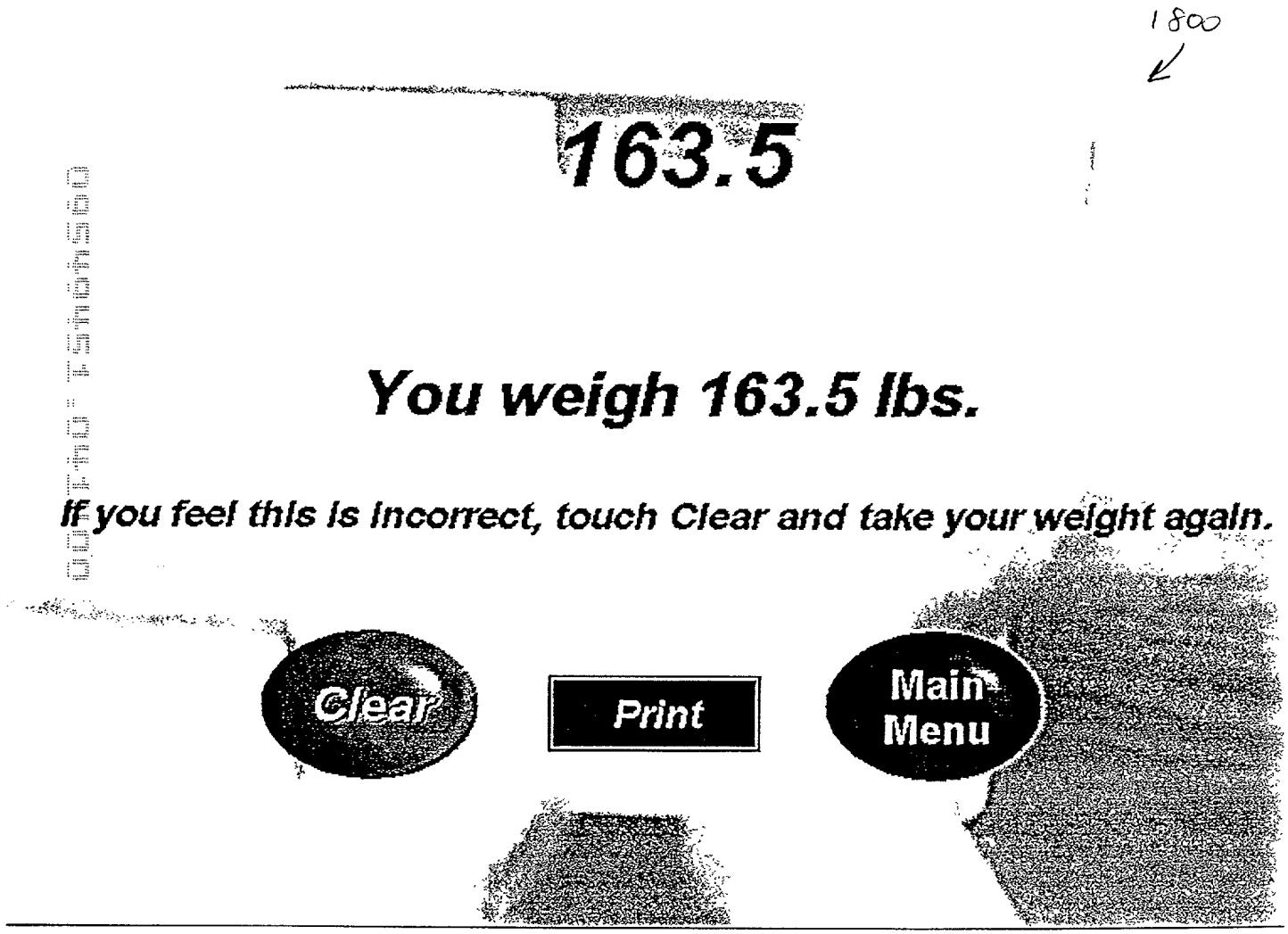

163.5
You weigh 163.5 lbs.
If you feel this is incorrect, touch Clear and take your weight again.
Clear
Print
Main Menu

FIG. 18

DECLARATION FOR PATENT APPLICATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below adjacent to my name.

I believe I am an original, first and joint inventor of subject matter (process, machine, manufacture, or composition of matter, or an improvement thereof) which is claimed and for which a patent is sought by way of the application entitled

Health Care Information System

which (check) ☒ is attached hereto.
☐ and is amended by the Preliminary Amendment attached hereto.
☐ was filed on _____ as Application Serial No.
☐ and was amended on ___ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information, which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

Prior Foreign Application(s)			Priority Claimed	
Number	Country	Day/Month/Year Filed	Yes	No
N/A			☐	☐

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

Provisional Application Number	Filing Date
N/A	

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) or PCT international application(s) designating the United States of America listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information, which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56, which became available between the filing date of the prior application(s) and the national or PCT international filing date of this application:

Application Serial No.	Filing Date	Status (patented, pending, abandoned)
N/A		

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the United States Patent and Trademark Office connected therewith:

Alan H. MacPherson (24,423); Brian D. Ogonowsky (31,988); David W. Heid (25,875); Norman R. Klivans (33,003); Edward C. Kwok (33,938); David E. Steuber (25,557); Michael Shenker (34,250); Stephen A. Terrile (32,946); Peter H. Kang (40,350); Ronald J. Meetin (29,089); Ken John Koestner (33,004); Omkar K. Suryadevara (36,320); David T. Millers (37,396); Kent B. Chambers (38,839); Michael P. Adams (34,763); Robert B. Morrill (43,817); Michael J. Halbert (40,633); Gary J. Edwards (41,008); James E. Parsons (34,691); Daniel P. Stewart (41,332); Philip W. Woo (39,880); John T. Winburn (26,822); Tom Chen (42,406); Fabio E. Marino (43,339); William W. Holloway (26,182); Don C. Lawrence (31,975); Marc R. Ascolese (42,268); Carmen C. Cook (42,433); David G. Dolezal (41,711); Roberta P. Saxon (43,087); Mary Jo Bertani (42,321); Dale R. Cook (42,434); Sam G. Campbell (42,381); Matthew J. Brigham (44,047); Hugh H. Matsubayashi (43,779); Patrick D. Benedicto (40,909); T.J. Singh (39,535); Shireen Irani Bacon (40,494); Rory G. Bens (44,028); George Wolken, Jr. (30,441); John A. Odozynski (28,769); Cameron K. Kerrigan (44,826); Kenneth C. Brooks (38,393); Paul E. Lewkowicz (44,870); Theodore P. Lopez (44,881); Mayankkumar M. Dixit (44,064); Eric Stephenson (38,321); Christopher Allenby (45,906); David C. Hsia (46,235) and Matthew Spark (43,453).

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Full name of sole (or first joint) inventor: Charles Bluth

Inventor's Signature: _____ Date: _____

Residence:

Post Office Address: Citizenship:

Full name of sole (or second joint) inventor: James Bluth

Inventor's Signature: _____ Date: _____

Residence:

Post Office Address: Citizenship:

Date Printed: 04/25/2005